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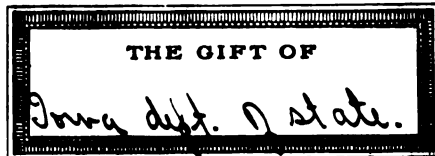
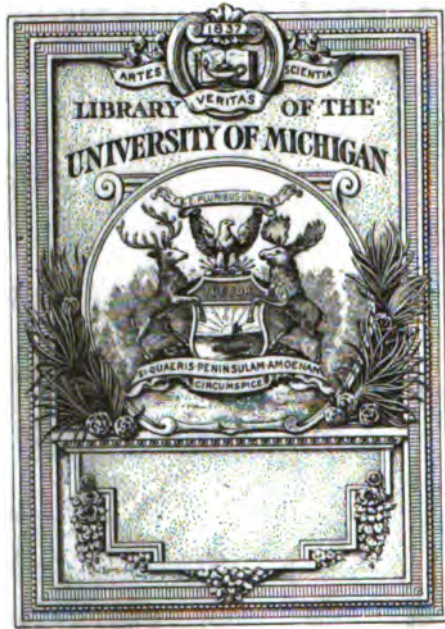
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# LEGISLATIVE DOCUMENTS

SUBMITTED TO THE

## Thirty-first General Assembly

OF THE

## STATE OF IOWA

Which Convened at Des Moines, January 8, 1906.

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ALBERT B. CUMMINS,	- - - - -	Governor
JOHN HERRIOTT,	-	Lieutenant Governor and President of the Senate
W. B. MARTIN,	- - - - -	Secretary of State
B. F. CARROLL,	- - - - -	Auditor of State
G. S. GILBERTSON,	- - - - -	Treasurer of State
JOHN F. RIGGS,	- -	Superintendent of Public Instruction
CHARLES W. MULLAN,	- - - - -	Attorney-General
GEORGE W. CLARKE,	-	Speaker of the House of Representatives

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VOLUME V.

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DES MOINES:  
BERNARD MURPHY, STATE PRINTER,  
1906.



## VOLUME I.

---

**Message.**

**Inaugural.**

**Report of Auditor of State.**

**Report of Treasurer of State.**

**Report on Pardons.**

**Report of Criminal Convictions.**

**Report of Land Department.**

**Report of Custodian of Public Buildings.**

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## VOLUME II.

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**Report of Railroad Commissioners, 1904.**

**Report of Railroad Commissioners, 1905.**

**Railway Assessment for 1905.**

**Railway Assessment for 1906.**

**Telephone and Telegraph Assessment for 1905.**

**Telephone and Telegraph Assessment for 1906.**

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## VOLUME III.

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**Report of Adjutant General.**

**Report of Attorney-General.**

**Report of Librarian.**

**Report of Historical Department.**

**Report of Historical Society.**

**Report of State University.**

**Report of Iowa State College of Agriculture and Mechanic Arts.**

**Report of State Normal School.**

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## VOLUME IV.

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**Report of Board of Control.**

**Report of Fish and Game Warden.**

**Report of Bureau of Labor Statistics.**

Insurance Reports for 1906. { Volume I. Fire.  
Volume II. Life.

## ERRATA.

### SCHOOLHOUSE FUND.—EXPENDITURES.

PAGE 8—COLUMN 1905.

For schoolhouses and sites.....	\$ 777,241.36
For libraries and apparatus.....	802.88
On bonds and interest.....	478,818.28
Paid for other purposes.....	196,078.41
Total expenditures.....	\$ 1,447,440.38
On hand .....	552,737.60
Total.....	\$ 2,000,177.96

### CONTINGENT FUND—RECEIPTS.

PAGE 8—COLUMN 1905.

On hand at last report .....	\$ 772,662.94
Received from district tax.....	2,286,448.38
Received from other sources.....	810,770.27
Total receipts .....	\$ 3,869,888.59



# STATE OF IOWA

## DEPARTMENT OF PUBLIC INSTRUCTION

DES MOINES

---

SUPERINTENDENT OF PUBLIC INSTRUCTION

JOHN F. RIGGS

DEPUTY SUPERINTENDENT

J. C. BENNETT

STENOGRAPHER

BYRDELLA JOHNSON

---

STATE BOARD OF EDUCATIONAL EXAMINERS

---

JOHN F. RIGGS, <i>ex-officio</i> President,	-	-	-	-	Des Moines
GEORGE E. MACLEAN, <i>ex-officio</i> ,	-	-	-	-	Iowa City
HOMER H. SEERLEY, <i>ex-officio</i> ,	-	-	-	-	Cedar Falls
OWEN J. MCMANUS,	-	-	-	-	Council Bluffs
*MARIA M. ROBERTS,	-	-	-	-	Ames
VIOLA H. SCHELL, <i>Secretary</i> ,	-	-	-	-	Des Moines

\*Succeeded Mrs. Alice Altona, whose term expired Feb. 14, 1905.



# STATE OF IOWA

## DEPARTMENT OF PUBLIC INSTRUCTION

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VIOLA H. SCHELL, <i>Secretary,</i>	-	-	-	Des Moines

\*Succeeded Mrs. Alice Altona, whose term expired Feb. 14, 1905.



*To His Excellency, ALBERT B. CUMMINS, Governor of the State  
of Iowa:*

SIR;—I have the honor to submit herewith, as required by law,  
the biennial report of the department of public instruction for the  
period ending September 30, 1905.

JOHN F. RIGGS,  
*Superintendent of Public Instruction.*

# SUPERINTENDENTS OF PUBLIC INSTRUCTION.

## TERRITORY AND STATE OF IOWA.

Name.	County.	Time.	Postoffice.
William Reynolds.....	Des Moines..	1841-1842	Deceased.
James Harlan.....	Henry .....	1847—	Deceased.
Thos. H. Benton.....	Dubuque ....	1848-1854	Deceased.
James D. Eads.....	Lee.....	1854-1857	Deceased.
Joseph C. Stone.....	Johnson.....	1857—	Deceased.
M. L. Fisher.....	Clayton .....	1857-1858	Deceased.
Oran Faville.....	Mitchell.....	1864-1867	Deceased.
D. Frahclin Wells .....	Johnson.....	1867-1868	Deceased.
A. S. Kissell.....	Scott.....	1869-1872	Deceased.
Alonzo Abernethy.....	Crawford.....	1872-1876	Osage.
C. W. von Coelln.....	Black Hawk..	1876-1881	New London.
J. W. Akers.....	Linn.....	1882-1888	Chicago, Ill.
Henry Sabin.....	Clinton .....	1888-1892	Des Moines.
J. B. Knoepfler.....	Allamakee....	1892-1894	Cedar Falls.
Henry Sabin.....	Clinton .....	1894-1898	Des Moines.
Richard C. Barrett.....	Mitchell.....	1898-1904	Ames.
John F. Riggs.....	Keokuk.....	1904—	Des Moincs.

The office of Superintendent was abolished in 1842. Again in 1858 it was abolished and the duties were performed by the State Board of Education, of which Thos. H. Benton acted as secretary for five years.

## **PART I.**

**GENERAL SUMMARY OF STATISTICS.**

**DISCUSSION OF EDUCATIONAL TOPICS.**

**RECENT CIRCULARS OF INFORMATION AND  
SUGGESTIONS.**

**WORK OF THE STATE READING CIRCLE BOARD.,**

**WORK OF THE STATE BOARD OF EDUCATIONAL  
EXAMINERS.**

**SPECIAL DAYS FOR 1905.**

GENERAL SUMMARY OF STATISTICS.  
SECRETARIES' REPORTS.

SCHOOL DISTRICTS.

	1895	1900	1905
School Townships.....	1,193	1,187	1,182
Independent Districts.....	3,614	3,686	3,766
Whole Number of Districts.....	4,807	4,873	4,948
Sub-districts.....	9,280	9,423	9,403

SCHOOLS.

Ungraded.....	12,517	12,615	12,263
Rooms in Graded.....	4,777	5,766	6,607
Whole Number.....	17,294	18,381	18,870
Average Duration in Months.....	8	8	8

TEACHERS.

Males Employed.....	5,726	4,948	3,598
Females Employed.....	22,117	23,841	26,021
Whole Number.....	27,843	28,789	29,619
Average Monthly Compensation—Males.....	\$37.68	\$40.20	\$48.62
Average Monthly Compensation—Females. ...	\$31.63	\$30.24	\$36.06

SCHOLARS.

Between five and twenty-one—males.....	362,364	371,164	363,152
Between five and twenty-one—female.....	350,577	359,990	355,630
Total enumeration.....	712,941	731,154	718,782
Enrolled in Public Schools.....	533,824	566,223	550,376
Total average attendance .....	339,300	373,474	375,563
Percentage enrollment on enumeration.....	.75	.78	.77
Percentage attendance on enrollment .....	.64	.66	.68
Percentage attendance on enumeration.....	.48	.50	.52
Average tuition per month per scholar.....	\$1.87	\$1.96	\$2.23

## SECRETARIES' REPORT—CONTINUED.

## SCHOOL HOUSES.

Whole number.....	13,613	13,861	13,993
Value.....	15,645.543	17,655,992	22,456,618

## APPARATUS

Value.....	569,910	798,294	847,998
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## DISTRICT LIBRARIES

Number of Volumes.....	151,561	334,300	794,769
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## SHADE TREES ON SCHOOL GROUNDS

Number of Growing Trees.....	182,610	219,904	269,959
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## TEMPERANCE INSTRUCTION.

Schools teaching effects of stimulants.....	16,987	17,510	18,218
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## TREASURERS REPORT.

## SCHOOL HOUSE FUND.

## RECEIPTS.

	1885	1900	1905
On hand at last report.....	\$ 395,514.91	\$ 434,467.13	\$ 478,110.12
From district tax.....	739,887.26	803,850.14	960,811.22
From other sources.....	581,090.30	694,698.26	561,256.62
Total receipts.....	\$1,716,492.47	\$1,933,015.53	\$2,000,177.96

## REPORT OF THE

## EXPENDITURES.

For school-houses and sites.....	\$ 658,656.17	\$ 664,141.23	777,241.36
For libraries and apparatus.....	13,430.10	2,297.08	802.33
On bonds and interest.....	520,931.33	532,396.18	473,318.26
Paid for other purposes.....	169,834.33	158,856.09	145,120.90
Total expenditures.....	\$1,362,851.93	\$1,357,690.58	\$1,396,482.85
On hand.....	353,640.54	575,324.95	552,737.60
Total.....	\$1,716,492.47	\$1,933,015.53	\$1,949,220.45

## CONTINGENT FUND.

## RECEIPTS.

	1895	1900	1905
Onhand at last report.....	\$ 543,215.48	\$ 708,241.07	\$ 772,662.94
Received from district tax .....	1,631,354.76	1,675,388.91	228,445.38
Received from other sources.....	221,397.58	234,340.19	310,770.27
Total receipts.....	\$2,395,949.82	\$2,617,970.17	\$3,369,888.59

## DISBURSEMENTS

For fuel, rent, repairs, etc.....	\$1,114,181.10	\$1,282,340.35	\$1,707,536.51
Paid secretaries and treasurers.....	137,673.02	142,387.61	156,167.09
For records and apparatus.....		43,305.06	39,912.37
For library books and dictionaries.....		16,705.36	19,028.35
For free text-books.....		23,219.04	26,393.53
For text-books and general supplies.....	209,365.61	182,251.40	146,893.94
For other purposes.....	344,687.57	279,239.14	397,056.27
Total expenditures.....	\$1,805,907.30	\$1,969,447.96	\$2,492,988.06
On hand.....	590,042.52	648,522.21	876,900.53
Total disbursements.....	\$2,395,949.82	\$2,617,970.17	\$3,369,888.59

## TEACHERS' FUND

## RECEIPTS

	1895	1900	1905
On hand at last report.....	\$2,058,200.86	\$2,719,465.88	\$3,231,405.69
From district tax.....	4,305,995.81	4,715,506.75	5,969,517.74
From semi-annual apportionment.....	838,531.56	816,581.22	897,490.41
From other sources.....	140,508.48	187,205.91	208,652.93
Total receipts.....	\$7,343,236.71	\$8,438,759.76	10,307,066.77

## TREASURERS REPORT—CONTINUED.

## EXPENDITURES

Paid teachers.....	\$5,075,492.37	\$5,606,932.59	\$6,745,416.24
Paid for other purposes.....	73,623.01	94,848.06	69,484.30
Total expenditures.....	\$5,159,115.38	\$5,701,780.65	\$6,849,181.50
On hand.....	2,194,121.33	2,736,979.11	3,457,885.27
Total.....	\$7,343,236.71	\$8,438,759.76	10,307,066.77

## COUNTY SUPERVISION.

## EXAMINATION OF TEACHERS.

	1895	1900	1905
First grade certificates issued.....	11,848	3,308	3,649
Second grade certificates issued.....	14,336	14,131	14,205
Third grade certificates issued.....	1,145	7,144	5,531
Other certificates issued.....		723	1,026
Total number issued.....	27,329	25,306	24,411
Applicants rejected.....	5,225	4,456	4,702
Total number examined.....	32,554	29,762	29,195
Certificates revoked.....	4		
Average age of applicants.....	22.8	22	22
No experience in teaching.....	3,876	3,560	4,131
Taught less than one year.....	3,852	4,208	4,340
With state certificates or diplomas.....	677	1,285	1,557

## VISITATION OF SCHOOLS.

Schools visited.....	11,692	9,912	10,487
Visits made during the year.....	15,167	12,343	12,646
Educational meetings held.....	1,098	1,128	795

## APPEALS.

Number of cases.....	62	43	23
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## COMPENSATION.

Total paid County Superintendents.....	\$ 120,780.00	\$ 120,978.00	\$ 125,889.00
Average received per annum.....	\$ 1,220.00	\$ 1,222.00	\$ 1,272.00

# REPORT OF THE TEACHERS' NORMAL INSTITUTES

	1895	1900	1905
Number of institutes held.....	99	99	99
Continuing weeks.....	2.3	2.1	1.8
Males in attendance.....	3,678	2,412	1,718
Females in attendance.....	18,682	17,132	17,207
Total Attendance.....	22,360	19,544	18,925

## INSTITUTE FUND.

### RECEIPTS.

On hands at last report.....	17,988 14	14,564 88	14,885.12
Examination fees.....	32,822.00	32,588.00	32,763.00
Registration fees.....	22,360.00	19,544 00	19,075.00
State appropriation.....	4,950.00	4,950.00	4,950.00
From other sources.....	737.29	1,437.16	540.96
Total.....	78,857.43	73,084 04	72,214.08

### EXPENDITURES

For Instruction and lectures.....	\$ 48,579.39	\$ 51,711.51	\$ 49,110.97
For incidentals.....	10,483.79	6,963.17	6,685.26
On hand.....	19,794.25	14,409.36	16,417.85
Total.....	\$ 78,857.43	\$ 73,084.04	\$ 72,214.08

## PERMANENT SCHOOL FUND,

Amount in September.....	.....	.....	\$4,760,520.54
Interest on the same.....	.....	.....	214,132.30

## THE COST OF OUR SCHOOLS.

	1895	1900	1905
For teachers' salaries.....	5,075,492.37	5,606,932.59	6,745,416.24
For school houses, apparatus, etc.....	736,719.66	707,446.29	817,153.73
For general contingencies.....	2,505,662.58	2,714,540.31	3,227,039.95
Total.....	8,317,874.61	9,028,919.19	10,789,609.92

## COMPUTED ON TAXABLE PROPERTY.

## NUMBER OF MILLS FOR EACH DOLLAR OF ASSESSED VALUATION

Teacher salaries. ....	10.4	10.8
School houses, apparatus, etc. ....	1.3	1.3
General contingencies. ....	5.3	5.3
<b>Total</b> .....	<b>17.</b>	<b>17.4</b>

## ON ESTIMATED POPULATION.

## FOR EACH INDIVIDUAL OF ENTIRE POPULATION.

Teachers salaries. ....	2.47	2.52	3.05
School houses, apparatus, etc. ....	.36	.32	.37
General contingencies. ....	1.22	1.22	1.47
<b>Total</b> .....	<b>4.04</b>	<b>4.06</b>	<b>4.89</b>

## ON SCHOOL ENUMERATION

## FOR EACH YOUTH BETWEEN FIVE AND TWENTY-ONE

Teachers salaries. ....	7.12	7.67	9.38
School houses, apparatus, etc. ....	1.03	.97	1.14
General contingencies. ....	3.53	3.71	4.49
<b>Total</b> .....	<b>11.68</b>	<b>12.35</b>	<b>15.01</b>

## ON TOTAL ENROLLMENT.

## FOR EACH PUPIL ENROLLED IN SCHOOL.

Teachers salaries. ....	9.51	9.90	12.26
School houses, apparatus, etc. ....	1.38	1.25	1.48
General contingencies. ....	4.69	4.79	5.86
<b>Total</b> .....	<b>15.58</b>	<b>15.94</b>	<b>19.60</b>

## ON AVERAGE ATTENDANCE

FOR EACH PUPIL ACTUALLY IN ATTENDANCE THE AVERAGE  
TIME

Teachers' Salaries. ....	15.38	15.01	172.1
School houses, apparatus, etc. ....	2.24	1.89	.536
General contingencies. ....	7.46	7.27	8.98
<b>Total</b> .....	<b>25.08</b>	<b>24.17</b>	<b>28.79</b>

## TABULAR EXHIBIT SHOWING THE GROWTH OF THE PUBLIC

Year.	Districts.			Schools.			Teachers.				Pupils.			
	School town-ships.	Independent dis-tricts.	Subdistricts.	Rural schools.	Rooms in town and city schools.	Average annual session.	Number employed.		Average compensa-tion per month.	Number of persons between the ages of 6 and 21 years.	Number enrolled in public schools.	Total average attendance.	Average cost of tuition per month.	
							Males.	Females.						
									Males.	Females.				
1847		416		105			101	28	\$ 15.48	\$ 8.20	20,922	2,489		
1848		642		105			339	245	14.53	7.64	40,646	7,077		
1849		1,003		554			549	250	14.76	8.78	50,082	17,350		
1850		1,262		914			703	432			64,836	24,804		
1851		1,353		1,181			806	525			77,154	33,040		
1852		1,569		1,266			961	772			85,080	31,033		
1853		1,731		1,379		8 12	740	599			100,033	42,442	24,559	
1854		2,358		1,520		8 9	961	772	19.61	9.39	111,093	44,115		
1855														
1856		2,850		2,153			1,279	1,243	14.47	8.23	173,898	59,014		
1857		3,235		2,708			1,572	1,424	24.38	12.95	195,285	79,670		
1858		932	4,109	2,206			1,118	1,632	25.83	9.42	238,927	36,574		
1859		933	4,574	4,243			3,901	2,344	27.68	17.16	240,531	142,849	79,411	
1860		1,013	4,655	4,227			3,219	3,155	23.76	15.28	244,934	167,869	77,118	
1861		1,078	4,803	5,502			3,763	1,562	24.24	16.20	262,570	183,318	101,894	
1862		1,105	5,057	5,895			3,618	4,187	21.70	14.24	269,522	201,805	00,041	
1863		1,139	5,172	6,237		4 2	3,937	5,563	21.00	15.68	281,738	199,750	111,182	
1864		1,141	5,340	6,323		5 5	3,815	6,140	25.12	17.60	294,912	210,569	117,878	
1865		1,171	5,572	5,732		5 5	2,353	6,437	31.64	22.80	324,338	217,593	110,598	
1866		1,185	5,926	5,920		5 4	2,675	6,670	33.60	23.76	348,498	241,827	135,174	
1867		1,321	6,168	6,239		5 0	3,676	6,657	35.88	24.64	372,959	279,281	148,610	
1868		1,412	6,410	6,439	212	6 8	4,123	6,448	35.42	25.72	393,630	279,007	160,778	
1869		1,462	6,773	6,788	221	6 12	4,479	7,515	36.91	27.16	418,138	296,138	178,329	
1870		1,176	6,986	6,919	213	6 4	4,909	7,806	35.60	26.80	431,134	320,803	202,246	
1871		1,240	7,716	7,823	229	6 10	5,483	8,587	33.00	27.80	460,629	344,938	211,562	
1872		1,317	8,438	8,153	403	6 10	5,901	9,330	31.00	23.66	475,499	340,789	214,905	
1873		1,266	8,773	8,797	419	6 10	6,091	10,193	35.28	27.68	491,841	347,572	204,201	
1874		1,195	9,286	8,816	377	6 14	6,273	10,729	35.95	27.67	506,336	337,035	215,656	
1875		1,134	9,268	9,203	405	6 16	6,500	11,615	36.68	28.34	533,570	334,012	225,415	
1876		1,099	9,931	9,017	454	6 16	6,830	12,222	37.27	28.09	561,920	336,825	229,315	
1877		1,036	9,138	9,015	495	7 5	7,348	12,518	34.83	29.09	567,869	341,163	251,372	
1878		1,119	8,117	7,261	12,008	7 6	7,681	13,028	33.98	27.84	575,474	423,852	256,903	
1879		1,140	8,139	7,543	12,038	7 7	7,573	13,579	31.71	26.40	577,353	431,817	264,702	
1880		1,162	8,192	7,648	12,309	7 8	7,251	14,314	31.16	26.28	583,555	423,057	259,836	
1881		1,161	8,178	7,808	12,311	7 8	6,546	15,280	34.50	27.25	594,770	431,513	254,048	
1882		1,170	8,303	8,134	12,359	7 2	6,044	16,037	35.20	27.48	604,739	406,947	258,681	
1883		1,171	8,189	8,135	12,720	7 2	5,695	16,521	35.21	27.80	621,012	477,232	270,901	
1884		1,183	8,231	8,392	12,939	7 4	5,760	17,359	37.40	30.42	633,151	472,965	284,498	
1885		1,202	8,401	8,543	13,046	7 4	5,809	17,906	37.95	29.43	631,407	477,693	281,794	
1886		1,193	8,340	8,654	13,201	7 6	5,927	17,748	33.42	29.10	638,153	480,738	284,587	
1887		1,199	8,409	8,661	13,194	7 8	6,007	18,205	33.00	29.50	638,448	487,194	294,937	
1888		1,193	8,428	8,634	13,005	7 14	5,595	19,518	35.44	30.05	639,248	477,184	297,070	
1889		1,183	8,451	8,768	12,983	7 14	5,432	20,311	37.52	30.37	642,606	499,229	304,836	
1890		1,202	8,439	8,875	13,091	7 16	5,410	21,107	37.09	30.21	640,494	493,267	306,399	
1891		1,198	8,463	8,959	12,178	7 16	5,228	21,541	37.54	30.52	648,545	503,755	317,287	
1892		1,191	8,532	9,145	12,332	7 18	4,975	22,275	37.76	30.73	675,024	509,890	321,708	
1893		1,185	8,581	9,145	12,847	7 16	4,837	23,494	38.73	30.81	687,150	518,614	324,217	
1894		1,191	8,577	9,191	13,456	7 18	5,211	22,742	38.19	31.60	697,235	502,781	331,408	
1895		1,193	8,614	9,281	12,577	7 18	5,726	22,117	37.64	31.53	712,911	533,824	339,300	
1896		1,189	8,633	9,265	12,629	8 0	5,614	22,507	38.28	32.24	720,075	513,052	345,242	
1897		1,190	8,617	9,311	12,578	8 2	5,814	22,203	37.01	31.45	727,634	516,838	347,610	
1898		1,193	8,642	9,342	12,678	8 1	5,855	22,839	37.10	31.20	737,456	518,852	370,845	
1899		1,175	8,682	9,374	12,618	7 9	5,577	22,860	38.81	30.31	727,775	544,992	364,409	
1900		1,187	8,686	9,423	12,615	8 0	4,948	23,841	40.30	30.24	731,151	576,228	373,474	
1901		1,187	8,711	9,411	12,620	8 9	4,757	24,083	41.51	30.69	735,159	561,082	373,547	
1902		1,187	8,700	9,487	12,461	8 8	4,161	24,912	43.63	30.17	728,810	560,173	374,103	
1903		1,192	8,721	9,496	12,472	8 8	3,783	25,554	45.92	32.60	721,490	550,052	385,438	
1904		1,189	8,741	9,414	12,493	8 8	3,839	26,019	48.24	35.51	724,966	545,940	378,023	
1905		1,182	8,766	9,403	12,266	8 8	3,128	26,021	49.62	38.05	716,882	550,876	377,097	

\*The state census for the same year shows 749,496.

†Including independent districts.

‡Rooms in town and city schools.

## SCHOOL SYSTEM OF IOWA FROM 1847 TO 1905 INCLUSIVE.

Total number.	Schoolhouses.	Value.	Volumes in libraries.	Teachers' institutes held.	Expenditures.				Annual interest of permanent fund.	Total equalized assessment of entire state.	Year.
					Teachers' salaries.	Schoolhouses, grounds, libraries and apparatus.	Fuel and other contingencies.	Total.			
357	85,506	180	21,648	18,278	1,812	44,739	2,185	14,540,000	1847		
358	63,762	287	30,814	30,955	3,459	71,219	6,138	18,509,000	1848		
359	63,412	476	47,502	25,799	3,475	78,756	23,546	22,623,000	1849		
360	99,708	703	54,643	18,822	4,425	77,890	20,600	28,465,000	1850		
361	144,979	948	72,095	81,800	3,730	107,625	36,186	38,427,000	1851		
362	170,564	576	87,817	80,224	3,924	121,965	50,155	49,540,000	1852		
363	265,799	875	147,862	128,437	15,442	291,741	68,796	106,895,000	1853		
364	571,064	623	198,142	147,167	19,206	384,515	111,889	164,395,000	1856		
365	971,004	249	148,574	98,719	51,181	298,474	103,968	210,045,000	1857		
366	949,747	637	383,589	166,802	67,241	617,632	145,085	179,828,000	1858		
367	206,840	2,325	448,468	158,291	52,179	655,938	142,151	193,885,000	1859		
368	288,837	2,995	518,591	124,908	40,959	694,447	140,426	177,451,000	1861		
369	290,288	3,898	515,939	180,805	49,027	704,771	155,217	175,000,000	1862		
370	304,788	3,857	570,115	160,258	58,289	788,657	123,766	167,109,000	1863		
371	789,131	4,840	686,672	199,590	78,029	964,291	135,329	165,000,000	1864		
372	183,788	6,389	856,725	297,459	111,489	1,265,667	138,840	215,088,000	1865		
373	836,757	10,334	1,006,628	572,593	158,739	1,737,955	165,844	220,000,000	1866		
374	450,978	9,308	1,161,653	692,034	185,910	2,089,597	177,791	256,517,000	1867		
375	597,944	8,776	1,330,823	917,604	415,484	2,663,911	201,403	260,000,000	1868		
376	374,542	8,932	1,438,964	941,884	466,186	3,146,084	204,604	295,000,000	1869		
377	619,693	11,999	1,636,951	1,038,404	378,055	3,043,420	238,376	300,000,000	1870		
378	619,693	11,482	1,900,898	995,617	432,680	3,269,190	226,111	349,088,000	1871		
379	6,868,910	11,783	2,130,047	1,212,722	722,597	4,065,666	249,077	366,076,000	1872		
380	6,868,910	12,944	2,248,676	1,184,088	796,095	4,229,454	275,789	389,124,000	1873		
381	6,868,910	10,719	2,447,490	1,154,745	832,646	4,448,482	304,886	374,340,000	1874		
382	6,868,910	13,120	2,598,440	1,114,684	892,626	4,605,740	318,997	395,428,000	1875		
383	6,868,910	17,122	2,784,099	1,168,057	1,205,618	4,957,774	328,021	401,284,000	1876		
384	6,868,910	17,329	2,953,645	1,106,788	1,136,996	5,197,428	276,960	404,870,000	1877		
385	6,868,910	20,587	3,011,280	1,101,956	990,213	5,103,399	284,013	401,488,000	1878		
386	6,868,910	22,581	3,227,808	1,149,718	979,422	5,051,478	276,218	405,654,000	1879		
387	6,868,910	22,609	3,201,948	1,281,598	787,708	4,921,249	282,908	409,819,000	1880		
388	6,868,910	26,751	3,040,716	1,263,662	825,441	5,120,820	234,622	419,816,000	1881		
389	6,868,910	27,899	3,218,380	1,404,727	933,212	5,558,259	225,997	426,281,000	1882		
390	6,868,910	34,749	3,630,506	1,426,760	1,041,656	6,098,442	229,748	464,105,000	1883		
391	6,868,910	33,922	3,636,453	1,487,395	1,053,123	6,236,971	242,710	464,508,000	1884		
392	6,868,910	37,095	3,777,092	1,227,815	1,049,406	6,054,818	248,290	488,959,000	1885		
393	6,868,910	46,527	3,981,038	1,280,135	1,071,005	6,382,178	250,898	489,540,000	1886		
394	6,868,910	55,203	4,026,919	1,262,794	1,086,752	6,379,469	215,207	500,950,000	1887		
395	6,868,910	63,169	4,107,102	1,251,188	1,048,269	6,406,569	261,768	504,901,000	1888		
396	6,868,910	74,891	4,197,165	1,582,777	1,068,186	6,848,128	263,690	522,567,000	1889		
397	6,868,910	84,957	4,318,871	1,380,660	1,010,778	6,710,817	266,838	520,983,000	1890		
398	6,868,910	84,701	4,458,500	1,611,418	1,074,195	7,144,198	247,688	531,398,526	1891		
399	6,868,910	106,130	4,589,836	1,247,209	1,585,110	7,421,552	253,989	593,988,369	1892		
400	6,868,910	122,728	4,789,328	1,809,970	1,820,082	7,913,575	229,508	565,857,799	1893		
401	6,868,910	151,904	4,967,251	1,471,555	1,831,734	8,200,540	237,067	559,288,362	1894		
402	6,868,910	151,561	5,075,492	1,862,852	1,879,531	8,817,875	235,663	558,895,292	1895		
403	6,868,910	176,519	5,205,287	1,880,451	1,851,808	8,837,046	234,918	555,984,549	1896		
404	6,868,910	212,702	5,264,354	1,841,885	1,834,189	8,440,428	238,910	555,061,274	1897		
405	6,868,910	252,972	5,815,157	1,283,634	1,802,977	8,401,768	296,855	572,403,061	1898		
406	6,868,910	300,795	5,417,663	1,283,668	1,860,169	8,581,489	236,277	572,490,432	1899		
407	6,868,910	330,300	5,698,932	1,258,844	2,163,142	9,028,918	237,400	589,753,769	1900		
408	6,868,910	353,554	5,747,389	1,413,567	2,160,446	9,311,652	271,885	538,482,618	1901		
409	6,868,910	634,110	5,981,652	1,411,422	2,163,816	9,556,890	214,078	572,840,391	1902		
410	6,868,910	643,778	6,242,926	1,056,751	2,286,812	10,284,989	214,125	637,937,896	1903		
411	6,868,910	714,492	6,541,756	998,861	2,162,577	10,696,692	214,126	641,832,582	1904		
412	6,868,910	894,789	6,745,416	851,897	3,192,297	10,789,610	214,194	620,894,170	1905		

THIRTY-SECOND BIENNIAL REPORT OF THE SUPER-  
INTENDENT OF PUBLIC INSTRUCTION.

## IN GENERAL.

With \$20,000,000 invested in public school buildings and equipment, and with an annual expenditure of over \$10,000,000 for the support of our public schools, and the erection of new buildings, the people of Iowa give proof of a loyalty to the cause of education that no one can question. In addition to this vast outlay for the benefit of the more than 540,000 children enrolled annually in the public schools of our state, must be added the money spent in support of the nearly 300 parochial schools, the numerous academies, business colleges, private normal schools, colleges and universities,—institutions employing in the aggregate 1984 professors and teachers and enrolling annually more than forty-two thousand students. Vast as is the amount we spend annually in supporting our schools of all classes and grades, it is imperative that there shall be no retrenchment. Indeed in hundreds of districts the present expenditure is inadequate for the work attempted. The problem set before each of the 4948 school boards of Iowa is not how to run the school with the fewest dollars, but how the school may be made the most efficient.

“No common school system” says Horace Mann “can ever succeed where the compensation is so meager as to encourage only those of the most ordinary talents and attainments to embark in it.”

It is a hopeful sign of the times that teachers' salaries in Iowa have advanced \$2.63 per month for males and \$3.46 per month for females within the biennial period covered by this report. But in thousands of schools the wages are yet too low to attract and hold the best teaching talent. Indeed the advance in teachers wages in recent years has out run but little the increased cost of living, and has barely kept pace with the advance in wages in other lines of work. So many remunerative occupations are now open to promising young men and young women, that many whose services are sorely needed in the schools cannot be induced to enter the teaching profession. The loss of men from the

teachers' ranks is particularly noticeable. Forty years ago 37 out of every one hundred teachers employed in Iowa were men; twenty years ago 31 out of every one hundred were men; while for the year just closed there were but 14 males out of every one hundred Iowa teachers. For the United States as a whole the percentage of male teachers has decreased from 42.8 per cent in 1880 and 28.8 per cent in 1900.

With the teachers' tenure more permanent and with a decided advance in the salaries paid, men as well as women would be attracted to the profession in greater numbers and a larger per cent of both would come to their work with that thorough preparation so essential to the highest success of the school.

#### SUMMARY OF RECOMMENDATION.

1. A uniform system of examining and licensing teachers and accepting scholastic work of superior grade in lieu of a part or all of the examination for a state certificate. (See page 23 part I, and pages 147 to 154, part II.)

2. A change in the time of receiving the secretaries' and treasurers' reports, from the third Monday of September to an earlier date thus making all school reports due *after* the close of the schools in early summer, and before the opening of the schools in the fall. (See page 19, part I.)

3. To authorize the change of boundaries between contiguous school corporations in such a way that consolidated districts may be more easily established. (See pages 20 to 23, part I, and section 5, page 139, part II.)

4. To require the county board of supervisors to audit and allow claims for the traveling expenses of the county superintendent while in the performance of official duty. (See page 16, part I.)

5. To grant state aid on basis of average daily attendance to such high schools as maintain a prescribed standard of work. (See page 18, part I.)

6. To provide competent inspection of school buildings. (See page 28, part I.)

7. To increase the possible amount that may be levied in any school corporation for transporting children to and from school. (See page 27, part I.)

#### WORK OF THE COUNTY SUPERINTENDENT.

The work of the County Superintendents of the state, taken as a whole, is growing constantly in efficiency. No other office in the county is more important or requires qualifications of so high an order.

The County Superintendent's work is distinctly supervisory and he should be relieved as far as possible from clerical duties. His work is more in the field than within the four walls of his office. He renders the greater service by school visitation, by conducting county and township educational meetings, and by mingling with the people where educational questions may be discussed and educational sentiment be strengthened.

A large and important part of the county superintendent's work is necessarily away from the county seat. That Iowa county superintendents within the biennial period have made 12646 visits to schools and have conducted 795 educational meetings is an eloquent tribute to their integrity and energy, in view of the fact that such work is optional and not obligatory. The law offers a premium for inactivity, since the superintendent is at far less expense in his office than when out among the schools.

In my opinion it is both unjust and impolitic to deny the county superintendent his reasonable expenses when absent from his home in the performance of official duty. The law should require the county board of supervisors to audit and allow claims for traveling expenses for this officer, within definite limits for any month, and should require that such claims be itemized and sworn to by the county superintendent.

#### HIGHER EDUCATION.

That there is an unmistakable trend toward higher education on the part of Iowa youth is evidenced by the fact that the at-

tendance upon our three state schools has increased from 2548 in 1895 to 4013 in 1905, and the attendance upon our fifteen standard denominational colleges has, within the same period increased from 4414 to 6668. In other words the state schools taken together have made a gain of 57.4 per cent and the denominational colleges a gain of 51 per cent within ten years. The enrollment given does not include the 1574 students enrolled in the summer schools of the State Normal and State University and the short courses of the Agricultural College; nor the 576 students enrolled in the summer schools of Simpson, Drake and Morning Side Colleges.

Then aside from the institutions to which reference has just been made a number of private colleges of high grade are in a prosperous condition and with a rapidly growing patronage.

The growth of our high schools and colleges is all the more noteworthy when it is remembered that the state has, within the time mentioned, gained but 7.4 per cent in population.

#### STATE SCHOOLS.

Iowa takes pardonable pride in her three great state schools. Each in its class easily ranks with the very best in the country. For the maintenance of the present high standards and for the further development of these schools, the broad liberal policy that has obtained in the past should be continued. With the laboratory method of instruction and with each department in charge of a trained specialist the cost of maintenance is necessarily much greater than formerly when the didactic method of instruction obtained. That, through the introduction of modern methods, the efficiency of these schools has been greatly increased there can be no question. In the light of the work accomplished and its great importance to the state the annual expenditures are reasonable and the askings of the various boards for the next year will be found to be based upon the immediate and urgent needs of these institutions.

#### PRIVATE AND DENOMINATIONAL COLLEGES.

Our large number of private and denominational colleges do a most valuable public service without cost to the state. Each

year these schools graduate a large number of young men and women, who, in the main, become leaders in the various vocations in which they engage and in a marked way raise the average intelligence and efficiency of the state as a whole.

#### HIGH SCHOOLS.

The number of schools in Iowa offering one or more years of work above the grammar grades has rapidly increased within the past twenty-five years and particularly within the last half of that period. At the present time, there are not less than 600 village, town and city schools doing work of high school grade. Of these 174 are reported as carrying a three year course, and 354 as carrying a four year course. Our high schools graduated in the aggregate 2018 boys and 3299 girls in 1905. Of these graduates 1174 are now enrolled in higher institutions of learning and 1039 are engaged in teaching. While very many of our high schools are doing superior work, it is to be regretted that there is no attempt at uniformity in the courses pursued except in those schools (less than one-fourth of the entire number) carrying work that fits for entrance to the University and the Standard Colleges of the state.

Each school board has practically a free hand in the matter of determining the high school course of study and thereafter in modifying it at will. While section 2776, of the school laws provides that the "course of study shall be subject to the approval of the superintendent of Public Instruction," there is no penalty for the board that does not submit its course for approval, or that adopts a course other than that recommended by the Superintendent of Public Instruction. Nothing approaching uniformity can be expected in the courses for either class of high schools or in the qualifications of the teachers in the same so long as each school board is a law unto itself in these matters.

A regrettable tendency in small towns and villages is to put in courses of study advanced far beyond the ability of the corporations to adequately support. In consequence the one or two teachers employed are overburdened and the work is often poorly done.

There should be standard courses for schools doing two years, three years, or four years of high school work, and full recognition should be given each class of schools for the work done.

But confusion and uncertainty will exist so long as courses are merely "recommended" and the school boards, principals, and superintendents are left to follow their own inclinations. Both in Wisconsin and Minnesota the state gives financial aid to such high schools as maintain a standard defined in the law.

In my opinion the law in this state should clearly define the various classes of high schools and should name the special qualifications to be possessed by teachers in such schools. Then to insure a compliance with the law, state aid, in an amount to be determined, should be given those schools that comply in all respects with the law.

A detailed report on the high school courses, with the faculties, for the school year 1905-1906 will be found in the last chapter of this report.

#### DEFINING THE SCHOOL YEAR.

Since school directors are elected and qualify in March, one school year defined in the law begins with the induction into office of the newly elected directors; but since the school secretaries and school treasurers make their annual reports on the third Monday in September, the fiscal school year begins on this date. Again it is common to speak of the school year as beginning with the opening of school in September and ending with the close of school in June or July. There is, therefore, ambiguity in the term "school year." A serious confusion often results, making it difficult to get uniform or accurate reports from school officers.

The requirement that newly elected directors shall assume their duties on the third Monday in March is unfortunate. It would be much better if it were the first of July instead. At present one of the first duties the new board exercises is to elect teachers for the spring term, thereby encouraging a general change of teachers, and disturbing the unity of the school work

which logically should continue without interruption until the beginning of the long summer vacation. This difficulty would entirely disappear if the newly elected directors were to assume office in June instead of March.

It would also be a distinct advantage to have the regular fall meeting brought forward from the third Monday of September to the first of July, making the fiscal school year begin on that date. All our annual reports would then cover the same period, and much of the present confusion and inaccuracy would disappear. Such a change would also make the reports of school officers available two and one-half months earlier than at present, and thus enable the county superintendents to begin the work of school visitation soon after the opening of the schools in September.

#### THE LARGE VERSUS THE SMALL DISTRICT.

Attention is called to the statistics of country school enrollment and attendance, found on pages 96 to 107 part II of this report where it is shown that over 60 per cent of the rural schools of the state have an average daily attendance of 15 or less, while in fully five hundred of these schools the average daily attendance is 5 or less.

A school house within easy walking distance of every dwelling in the state has always been a popular doctrine with the people. A square containing just four sections, with nine of these squares in a civil township, and each square a little school world in itself, has to the popular mind seemed so ideal that any interference with the established order has always raised bitter opposition. That our present system of small districts is usually extravagant and is often the direct cause of inefficient schools cannot be questioned by anyone who will give thorough study to the question.

The agitation for large districts is not new, as many suppose. The foremost educators of the country have steadfastly opposed the plan of small districts.

In 1856 the General Assembly of Iowa appointed a commis-

sion to revise the school laws. America's most eminent educator, Horace Mann, was one of the commissioners and Amos Dean, Chancellor of the State University, the other. While in the report submitted to the general assembly the district organization was provided for, it was not in accordance with the best judgment of the commissioners, who followed the recommendation with this qualification:

"Your commissioners, however, feel bound to say that they have presented this organization simply in reference to the existing state of things. Their own settled convictions are, that the whole district system, as stated in the bill, should be promptly discontinued. \* \* \* "

The commissioners then set forth many cogent arguments in defense of the large district, among which are the following:

"It greatly reduces the number of district boards of directors, and consequently limits the expenses attending these boards."

"It renders the position of president of the board more honorable, makes it a higher mark of distinction, gives a larger scope for a choice, and will tend to secure for it a higher grade of talent and attainment."

"It leads to the creation of more commodious schoolhouses with larger accommodations and means of instruction."

"It tends to secure the services of more accomplished teachers."

"It offers facilities for classifying those of different ages and attainments, and for employing different grades of teachers in their instruction."

Hon. Maturin L. Fisher in his report of 1857 favored the Township as the school unit.

Hon. Thomas H. Benton, in his report of December 5, 1859 says: "I concur fully with the late superintendent of public instruction, Mr. Fisher, in regard to large districts. They give us a much more efficient and less expensive organization." "It is," says Mr. Benton, "to be regretted that the early educators and legislators of the country have incorporated the feature of

small districts into their country school systems. The precedent established by them has obtained so firm a hold on the public mind that none of those who have succeeded them are willing to assume the responsibility of departing from it."

In the year 1860, Hon. Samuel L. Howe, Co. Supt., of Henry County, said:

"I think our school system will never be satisfactory whilst the subdistrict plan is continued. I would abolish all subdistricts and give the township boards powers sufficient to meet all exigencies created thereby."

Hon. A. S. Kissell in his report dated January 1, 1872, makes a strong plea for the abandoning of all sub-district boundaries, making the township the district unit without subdivisions. This recommendation of the state superintendent was cordially commended by Governor Merrill in his message to the general assembly.

Hon. Alonzo Abernathy in his report of 1874 says:

"Efficiency can never be secured in the management of the schools and school funds where districts are so small as to impose but slight responsibility upon district officers, nor can the state ever know from any reports or statistics that can be obtained from such officers, what portions of the funds are judiciously expended."

Hon. C. W. von Coelln in his biennial report of 1874 says:

"The civil township should be the unit but it should not be subdivided into subdistricts, to be in part governed by a sub-director."

The quotations just given show that the agitation for larger districts and fewer schools was started in Iowa a half century ago. It was not, however, until recent years nor until after the experiment had proven successful in other states that transportation of pupils at public expense came to be advocated in Iowa. The civil township as a school district and transportation of all pupils to one school near its center can be effected under our laws as they now stand. But in the

opinion of very many people the civil township is too large for a single consolidated district, yet too small to be subdivided.

If the laws were so changed that the voters in any number of contiguous school corporations could redistrict in such a way as to best serve the interests of the children, the important work of eliminating weak, inefficient and expensive schools would go forward much more rapidly and with better satisfaction to all the people in interest.

The following table in which the statistics of graded schools and ungraded schools are separated, shows that the school year is one month longer in the graded than in the ungraded school. The table also shows that the enrollment *per room* is 73 per cent greater and the average daily attendance 100 per cent greater in the graded than in the ungraded school.

## PUBLIC SCHOOLS.

Independent city, town and village and rural corporations.  
School year 1904-1905.

	Class of Corporation—Totals.			Avg. per Corporation.		
	City and Town.	Rural.	State.	Class of Corporation.		
				City and Town.	Rural.	State.
Number of corporations.....	858	4,090	4,948	.....	.....	.....
Number of rooms.....	6,607	12,268	18,870	7.7	3.	3.8
Average No. months in year....	8.8	7.8	8.	8.8	7.8	8.
Number of teachers employed, males.....	1,099	2,499	3,598	1.3	.6	.7
Number of teachers employed, females.....	6,533	19,869	26,401	7.8	4.8	5.2
Total enrollment.....	268,976	251,700	520,676	818	69	111
Total average attendance.....	198,844	177,819	376,663	281	48	76
Value of schoolhouses.....	\$15,894,482	\$7,062,186	\$22,956,668	\$17,942	\$1,787	\$4,549
Value of apparatus.....	\$86,196	\$481,806	\$567,998	\$487	\$118	\$171
Number of volumes in libraries.....	830,807	468,993	1,299,800	886	118	161
Field for teachers salaries.....	\$8,480,856	\$8,264,566	\$16,745,422	\$4,087	\$798	\$1,868

## THE EXAMINATION AND CERTIFICATION OF TEACHERS.

Attention is called pointedly to our laws governing the granting of teachers' certificates and to the urgent need for their thorough revision.

Certificates as now issued in Iowa are of two general classes.

First. Those issued by the State Board of Educational Examiners, and valid in any county of the state, and

Second, Those issued by the County Superintendent, and valid only in the county in which they are issued.

No certificate of either class can be issued except upon examination.

The work of the state board has so far outgrown the law under which it operates that the board is seriously handicapped.

The law gives the board authority to employ a secretary, but no additional clerical help can be employed however urgent the need of such help may be. Not to exceed two persons can be employed to assist in the work of any examination. The expenditures of the board cannot exceed \$1500 in any year for all purposes, including the salary of the secretary, the traveling expenses and per diem of members, and the expenses incident to the inspection of accredited schools, the last named duty imposed, since the statute limiting the powers of the board was enacted.

The restrictions that embarrass the board should be removed and authority be granted it to employ such help as may be required—the total expenditures for any year to be within the aggregate amount collected in fees for that year. The board should also be given some discretion in the matter of validating state certificates from other states, and diplomas from colleges and normal schools of high rank. Such legislation has been enacted in many of the states. The licensing authorities in most of these states have entered into reciprocal relations so that a certificate of high grade issued in one of the states is honored in the others. But a certificate of high grade issued by the state educational board of Iowa has no recognition out side of Iowa for the reason that we are not permitted to validate any certificate issued in another state.

The granting of county certificates is vested solely in the county superintendent. While having as a guide the general directions issued by the superintendent of public instruction, the county superintendent, in practice sets his own standard since his markings may be rigid or they may be exceedingly liberal. In one county a mark of 90 per cent may mean no more than 70 per cent in another county. The county superintendent is also

subjected to the importunity of the relatives and friends of unsuccessful candidates and has ever before him the temptation of straining a point that a certificate may be issued to this or that applicant who has in fact failed in the examination.

Hon. Richard C. Barrett, in his Second Biennial Report, states the following objections to our present system of issuing certificates:

1. That county superintendents are not uniform in their markings. That so long as we have ninety-nine county superintendents we shall have as many different standards.

2. That the ideals of what teachers should be are so low in some counties that teachers holding first-class certificates in those counties could obtain only a second or third class in others.

3. That since the county superintendent is the product of a political party, he is expected to recognize his political friends in the granting of certificates.

4. That because of his authority to grant certificates, he is tempted, biennially at least, to be less stringent in the granting of the same, and as a consequence schools are often supplied with immature and incompetent teachers.

5. That being the sole judge of the fitness of applicants, he often becomes careless and negligent. That of one candidate he demands a full and complete examination, while to others certificates are issued, because of attendance upon the institute or teachers' association.

6. That he is in some instances so partial as to grant certificates to teachers in certain grades who are so utterly lacking in scholarship as to be unable to pass the examination required of other candidates.

"It is not contended by anyone," says Mr. Barrett, "that all of these charges are true in a single county but that they are all true when the state as a whole is considered."

A further discussion of our certificate system with proposed changes in our laws on this subject will be found at pages 147 to 154 of part two of this report.

There should in my judgment be but one authority in the state charged with the duty of licensing teachers. In no other way can we have anything approaching a uniform standard.

I am strongly of the opinion that those sections of the law referring to the examination and certification of teachers should be rewritten and brought into harmony and that the licensing power be placed either in the hands of the superintendent of public instruction or in the hands of the State Educational Board of Examiners, and that the certificate be made valid in any county of the state.

Under this system the County Superintendent would be enabled to devote from 25 to 40 days more per year than at present in the work of school supervision. The value of this additional work in the schools would outweigh many fold over any additional cost incident to the change of system recommended.

The law now requires every applicant for a county certificate to pay an examination fee which cannot be less than \$1 for each year the certificate is to run; and with the lower class of certificates the period may be as much less than a year as the County Superintendent may determine. All fees so collected go to the support of the Normal Institute.

With applicants for the state certificate a fee of \$3 is required, no part of which goes to the support of the Normal Institute, but all of which is paid into the state treasury.

We now have in force 2861 state certificates and diplomas which means an annual loss of an equal number of dollars in the aggregate to the Normal Institutes.

If the state is to continue the policy of requiring the teachers to support the Normal Institutes by fees, the burden should be distributed equally among the teachers. It is, therefore, recommended that no certificate or diploma should be valid in any county until it is registered by the County Superintendent of the county, and that a registration fee of fifty cents be required, the same to be paid into the institute fund. This would permit a reduction in the examination fees now charged for the higher classes of certificates and would result in a more equitable ad-

justment of the burdens. The forwarding of all examination manuscripts to the Capitol of the State where they would be read and marked and the result of the examination be determined under state authority, would entail an expense which, it is estimated would be not less than fifty cents for each person examined.

Since the number of persons to be examined within the biennial period cannot be estimated with any degree of accuracy, a direct appropriation from the state treasury is not advised, but it is recommended instead that one-half the fees collected by the County Superintendent be paid into the state treasury and that the expenses be met from the fund thus created. It would then be necessary for the Legislature to increase the annual institute appropriation provided for in section 2626 of the code.

For thirty and more years the state has paid \$4950 annually toward the support of the 99 Normal Institutes. This is at present 8.8 per cent of the cost of their maintainance. The state pays under certain conditions \$100 annually toward the expenses of each County Agricultural Fair and \$75 annually toward the expenses of each Farmers' Institute, and \$50 annually toward the support of the Teachers' Normal Institute.

More than twenty per cent of the counties do not maintain either a county fair or a farmers' institute; yet for the last fiscal year the state paid a little less than \$20,000 toward the expenses of the county fairs and farmers' institutes in the other counties.

The state in other lines has been generous and wisely so and it is believed that no serious objection will be offered to an increase in the state apportionment for the support of Normal Institutes, thereby permitting a percentage of the examination fees to be paid into the state treasury to meet the expenses incident to the state system of examining and licensing teachers.

#### TAX LEVY FOR TRANSPORTING CHILDREN TO AND FROM SCHOOL.

Section 2806 of the school laws provides for a maximum levy of five dollars for each person of school age for transporting children to and from school. This amount is entirely inadequate where a large number of children are transported, as in the town-

ships having but one school located at or near the center of the township. In such townships a very marked saving is effected in teachers' salaries, since fewer teachers are required, but the cost of transportation is necessarily heavy.

This is a local matter. The school board is directly amenable to the people. No member of the board can be legally employed to transport pupils. There is in all this assurance that the transportation will be effected at the lowest possible cost consistent with efficient service. No statutory limitation is necessary to insure economy.

#### HEATING, LIGHTING, AND VENTILATION OF SCHOOL BUILDINGS

For the biennial period an aggregate of \$777,241.36 was expended in Iowa for new school buildings.

Attention is called to the fact that the law requires no expert supervision of the architecture of these buildings including plans for their heating and ventilation.

The school directors having charge of the construction of new buildings or of the remodeling of old ones are men of intelligence and business ability, but they do not have the expert knowledge that will guide them safely in adopting plans for the construction and equipment of such buildings. In such matters they are sometimes unwittingly led into error by the plausible but erroneous representations of shrewd agents.

In my judgment the law should require certain essential things in the matter of heating, lighting, and ventilation of school buildings, and should provide competent inspection to insure its being carried into effect wherever a new building is to be erected or an old one remodeled.

It is of the greatest public concern that the physical surroundings of every school room and building be such that the health of the children be not endangered.

#### AN EXAMPLE WORTHY OF EMULATION.

Early in the present school year Mr. J. L. McCaull of Minneapolis, but formerly a resident of Garden Grove Township in

Decatur County, offered one hundred dollars to be given in cash prizes to the three rural schools in Garden Grove Township that should do the most in beautifying the school grounds and making the school room inviting.

Under this stimulus teachers and pupils in every school of the township put forth special effort with the result that public interest in the school environment was aroused and much good was accomplished.

The contest closed on June first, when a committee, appointed by the county superintendent, visited each school in the township and awarded the prizes.

#### ACCREDITED SCHOOLS FOR THE TRAINING OF TEACHERS.

The twenty-ninth general assembly passed a law providing for the "inspection, recognition and supervision of schools for the instruction and training of teachers for the common schools, and providing for the licensing of the graduates of the same." Under this law the following named academies, private normal schools and colleges have been inspected and their courses of study, faculties and equipment approved by the state educational board of examiners:

Buena Vista College, Storm Lake; Cedar Valley Seminary, Osage; Central University, Pella; Cornell College, Mount Vernon; Decorah Institute, Decorah; Denison Normal College, Denison; Drake University, Des Moines; Ellsworth College, Iowa Falls; Epworth Seminary, Epworth; Highland Park College, Des Moines; Humboldt College, Humboldt; Lenox College, Hopkinton; Simpson College, Indianola; Tobin College, Fort Dodge; Upper Iowa University, Fayette; Western College, Toledo; Western Normal College, Shenandoah; Western Union College, LeMars; Woodbine Normal, Woodbine.

Doubtless the law has not been in effect for a sufficient length of time to justify a safe opinion as to its value. The presidents of the larger institutions, such as Drake University, Simpson College, Cornell College and Highland Park College, report that

the law has had little, if any effect in their respective schools,—students in preparation for the work of teaching preferring to take the regular courses and at their completion write for the five year state certificate.

The president of Drake University has formally withdrawn his institution from the list of accredited schools and to all appearances the law is at present a dead letter in a few other schools on the list. In a majority of the schools, however, the law is favorably regarded by president and faculty.

The last inspection was made during the months of January and February, 1905 by the following persons: Mrs. Alice Altona, Miss Maria Roberts, Sup't O. J. McManus, Mr. J. C. Bennett, Pres't H. H. Seerley and President George E. MacLean.

President Seerley in his report on Cornell College Academy makes the following observation:

“While this academy has been on the accredited list from the beginning of the system, and while much attention has been given by the college authorities to the distribution of circulars making announcements concerning the plan of securing a two year state certificate, and while the college catalogue has given thorough recognition of the same thing by devoting a page to explaining the facts, the students who graduated from this course have not seen fit to avail themselves of the opportunity thus given and such certificate has not been eagerly sought, it being stated that not over three such candidates have been known during the time the arrangement has been in force.”

County Superintendent McManus, after completing his inspection, makes this observation:

“I believe that the state course would be more popular if the students were not required to pass an examination in all the subjects upon the completion of the same. If the state board were permitted to send examination questions for each subject as it is completed and have the students' papers sent in for grading, accompanied with an affidavit from the president of the school to the effect that the student received no help, it would do away with the bug bear of the final examination, encourage the students to do their best class work, raise the school in the estimation of the students by entitling its graduates to the two year state certificate without any further examination, and lessen the expenses to

the state for examination,—all of these without lessening the supervision of the state board."

Mr. Bennett in his report says:

"That the law in question has accomplished but little is patent to all. The reason is evident. It authorizes the educational board of examiners to prescribe a course of study and accredit schools, but it does not permit the board to give credit for work done in such institutions. I believe the educational board of examiners should have discretionary power to credit any or all of the work in a prescribed course of an accredited school and excuse the graduate from such course from so much of the examination as the board sees fit. I believe also that one who has completed a more extended course than the one prescribed as leading up to the two year state certificate should be eligible to the examination for that certificate if he has taken an equivalent amount of work in all subjects required in the prescribed course. We now have the anomaly of one who although having completed a longer course, superior it may be in all respects, is not eligible to this examination because not graduated from this particular course. The prescribed course should indicate the minimum and not the only course."

While the law under consideration has not met with the degree of success its friends anticipated, the experimental stage is not passed, and with slight modification it may become of great benefit alike to the smaller colleges and to the common schools.

In addition to the recommendations quoted from the reports of Messrs. McManus and Bennett, I would advise the annual visitation be made optional with the board in any particular case and not obligatory as at present. After two or three annual inspections the board can often determine from written reports the status of the school and the character of work being done; and in such cases it is a needless expense to the state to send an inspector.

#### AGRICULTURE IN COUNTRY SCHOOLS.

Within very recent years there has been a rapidly growing sentiment not only in Iowa but throughout the country, in favor of the teaching of agriculture in rural schools. This sentiment has in some states crystalized into law requiring that agriculture be taught in every country school.

The wisdom of such legislation in Iowa as conditions now exist may be seriously questioned. But a very small per cent of the teachers in any county have the kind of knowledge that would enable them to give this instruction. To require those without knowledge of the subject to at once organize classes in agriculture would mean abortive teaching or teaching so extremely elementary as to be of practically no value.

If we are to have legislation looking to the teaching of this important subject it would better be directed toward the teachers' preparation, requiring after a prescribed time, that every applicant for a teacher's certificate show a reasonable knowledge of the principles and laws underlying the science of agriculture. In many counties the teachers under the direction of the County Superintendent are giving considerable attention to this subject. The following table will show the status of the work for the last school year as reported by county superintendents

# COUNTIES IN WHICH SOME ATTENTION IS GIVEN TO THE TEACHING OF ELEMENTARY AGRICULTURE

County	Percent of schools in which taught	How taught	In what Grades	Length of lessons daily	Are books used by pupils.	Are books used by teachers
Allamakee	.....	General lessons	.....	.....	No	.....
Appanoose	.....	General lessons	.....	.....	.....	.....
Audubon	.....	.....	.....	.....	.....	.....
Boone	40	General lessons	all	.....	No	No
Blackhawk	.....	.....	.....	.....	.....	.....
Bremer	.....	.....	.....	.....	.....	.....
Buena Vista	10	General lessons	.....	20	No	Yes
Butler	.....	.....	.....	.....	.....	.....
Buchanan	.....	.....	.....	.....	.....	.....
Cahoon	50	General lessons	.....	.....	No	No
Cherokee	.....	General lessons	.....	.....	No	Yes
Clay	.....	.....	.....	.....	.....	.....
Clinton	85	General lessons	.....	.....	a number	Yes
Crawford	.....	.....	.....	.....	.....	.....
Dallas	20	General lessons	.....	.....	No	Yes
Davis	.....	.....	.....	.....	.....	.....
Emmet	Small	General lessons	.....	.....	.....	.....
Fayette	20	General lessons	.....	.....	No	Yes
Floyd	.....	.....	.....	.....	.....	.....
Fremont	.....	.....	.....	.....	.....	.....
Franklin	25	General lessons	.....	.....	No	some
Greene	.....	.....	.....	.....	.....	.....
Hancock	.....	General lessons	.....	.....	No	No
Harrison	.....	.....	.....	.....	.....	.....
Hardin	20	General lessons	.....	.....	.....	No
Henry	.....	.....	.....	.....	.....	.....
Humbolt	Small	General lessons	.....	.....	*	.....
Ida	.....	.....	.....	.....	.....	.....
Iowa	10	General lessons	.....	.....	No	Yes
Jackson	.....	.....	.....	.....	.....	.....
Jefferson	.....	General lessons	.....	.....	.....	.....
Jones	10	General lessons	.....	15	.....	Yes
Keokuk	100	General lessons	3, 4, 5 & 6	15	No	Yes
Lee	50	General lessons	.....	.....	No	Yes in part
Linn	50	General lessons	.....	.....	No	No
Lucas	Some	General lessons	.....	15	.....	Yes
Madison	5	General lessons	10th	.....	.....	Yes
Mitchell	33 1-3	General lessons	.....	.....	No	Yes
Monona	Many	.....	.....	.....	Text adapt	.....
Muscatine	.....	.....	.....	.....	.....	.....
Oceola	.....	.....	.....	.....	.....	.....
Page	.....	.....	.....	.....	No	No
Pocahontas	.....	.....	.....	.....	.....	.....
Polk	80	General lessons	.....	.....	No	Yes
Pottawattamie	No data	General lessons	All	20	No	Yes
Poweshiek	No data	General, if any	.....	.....	No	No
Ringgold	.....	.....	.....	.....	.....	.....
Sioux	.....	.....	.....	.....	.....	.....
Tama	Some	General lessons	.....	.....	.....	Yes
Taylor	.....	.....	.....	.....	.....	Yes
Van Buren	Small	General lessons	.....	.....	No	5 or 6

Books have been placed in school library.

**COUNTIES IN WHICH SOME ATTENTION IS GIVEN TO THE TEACHING OF ELEMENTARY AGRICULTURE.—CONTINUED.**

County	Per cent of schools in which taught	How taught	In what Grade	Length of lessons daily	Are books used by pupils.	Are books used by teachers
Washington....	75	General lessons	.....	.....	No	Yes
Webster. ....	.....	.....	.....	.....	.....	.....
Winneshiek ....	.....	.....	.....	.....	.....	.....
Winnebago ....	.....	.....	.....	.....	.....	.....
Worth.....	25	Both methods	7 and 8	.....	A few	In most
Wright.....	100	In classes	7 and 8	alt. with phys.	Yes	Yes

## COMMENTS OF COUNTY SUPERINTENDENTS.

I question the practicability of the effort in schools having 18 to 20 year old girls for teachers.

W. M. SPEERS,  
Appanoose County.

I believe it to be desirable and practicable that rural schools should teach the elements of agriculture \* \* \*. I believe the matter may best be presented in general lessons with abundant illustrations in the way of experiment, collection of seeds, plants and leaves, seed testing etc. Supplementary reading in this line would be very helpful. \* \* \* Such lessons should develop a love for the farm and its interests, making rural life more beautiful and more desirable to the children of the rural schools.

CHAS. ELLIOTT,  
Black Hawk County.

I believe that, could the subject be presented by teachers who understand something of agriculture, theoretically and practically it could be made of much practical value, but in the hands of teachers who know little or nothing about it as is the case with a large majority of those now in the profession, its attempted presentation is a farce.

JOHN T. REMICK,  
Bremer County.

I am of the opinion that agriculture should be added to the course. My idea is that it should be taught in connection with nature study and geography. Several good text books are published covering the subject and I have no doubt it would have great influence on the future prosperity of the state. The wide interest taken in the "Corn Specials" last winter shows that scientific farming is coming to be better appreciated and the farming community would no doubt welcome a practical course in agriculture in our public schools.

J. E. DURKEE,  
Buena Vista County.

The subject of agriculture is practical and profitable to a certain degree, but may be overdone. Insufficient knowledge of the subject on the part of the teachers is one hindrance.

W. R. SANDY,  
Calhoun County.

Elementary agriculture has for the past two years received very much attention in the rural schools of Clinton county \* \* \*. A more systematic line of work is being inaugurated this year. I believe that much can be done for our schools if elementary agriculture were included in the state course of study or if a manual dealing with the subject supplementary to the hand-book were issued by the State Department. Our farmers are awake to the advantages to be gained through the proper presentation of the work, and little, if any, objection would come if the subject be placed as one of the regular ones in the school curriculum.

GEO. E. FARRELL,  
Clinton County.

The matter of nature study and agriculture has gotten a start in the schools of this county. Books such as *Life on the Farm*, *School and Farm*, etc., have been placed in many of the school libraries and considerable interest has been aroused. Many of the parents are reading these books and a healthy sentiment is being awakened.

R. F. WOOD,  
Dallas County.

I am much pleased with the thought that if we can do something to interest the country boy and girl in things that they have to deal with we shall be doing them and the world at large a great service. \* \* \* By teaching the young people the science of farming and the saving of the soil, the rotation of crops, and other such helpful things, we can help to give dignity to farm life and make the boys and girls long to stay on the "old farm" instead of rushing to the already crowded city to eke out a mere existence.

MATTIE LEE A. LAIR,  
Fremont County.

Without doubt the subject of agriculture in rural schools can be made very interesting and profitable. I believe it to be both practical and desirable in that it brings the child in closer touch with nature and has a tendency to improve and develop agricultural conditions by means of a closer study of existing conditions.

S. E. CAMPBELL,  
Franklin County.

We are not prepared to teach Agriculture in the Public Schools. We could not properly prepare the teachers by giving a course in that subject in the County Institute, even if we could secure the instructors, which we could not do now. We are not prepared to teach it.

A. J. OBLINGER,  
Greene County.

Do not favor adding another branch, the elements of agriculture, to the common school course of study. I do believe in practical nature study work that will interest the boys and girls in farm topics, in so far as the teachers may be competent to handle the subject.

A. M. DEYOE,  
Hancock County.

I believe that Agriculture should be taught in our schools, because almost all other lines of industry depend for success, upon the character of crops raised, market price etc.; and what ever tends to develop intelligent, contented workers on the farms is a help to the country at large.

ELLA B. CHASSELL,  
Hardin County.

It is practical because of its necessity. It is desirable in order to interest the boys and girls in the farm life and keep them on the farm, and because the great majority of the people want it. The only objection at the present time to the teaching of Agriculture in our schools is the lack of knowledge on the part of the teacher to properly present it.

H. T. PORTS,  
Iowa County.

\* \* I hope the state will make provision for the instruction of teachers in agriculture and examinations therein. Then I believe its general utility would soon be widely acknowledged.

C. C. DUDLEY

Jackson County.

\* \* A great deal of work is done in our schools classed as "nature work" that is almost the same as that known as Elementary Agriculture, as outlined in some courses. A few schools have had exhibits of products raised and cared for by the children. This subject in the course of study for rural schools is desirable and practicable if teachers are given enough time before having to teach it.

ANNA WHITE,

Jefierson County.

During the last two institutes in this county, the subject of agriculture has been presented to the teachers and an active interest has been awakened. A few carried the inspiration thus gained into the classroom. \* \* \* As to desirability, there is little question, but on the ground of practicability an issue might be raised. The greatest obstacle is the ignorance of our present teaching force of the most elementary principles.

CLIFFORD B. PAUL,

Jones County.

I am in favor of teaching the elements of agriculture in the rural schools because of the great interest it adds to all other school work, because it helps to connect the school and home, because it offers a way to get hold of some dull or mean boy or girl who could not be reached in any other way \* \* \* \*. It furnishes a chance for experiment in a way that no other branch of study can offer. Children like to experiment and if this tendency can be developed great and good results will follow.

CAP E. MILLER,

Keokuk County.

The teaching of agriculture is not only desirable but necessary in our locality.

LAURA FITCH,

Lucas County.

There is no good reason why Elementary Agriculture should not be taught in the rural schools. I would suggest that to introduce the study into the schools, it would be well to take some interesting elementary text-book and use it as a supplementary reader in the 7th and 8th grades.

T. H. STONE,

Madison County.

In about sixty of our rural schools a little book of experiments called "Rural School Agriculture" was placed in the hands of teachers. Many of the 239 experiments are readily within the reach of all rural school teachers. To about 35 schools seed corn from Iowa State college was given last spring. 500 kernels were given to a school for testing. Boys were asked to plant in soil, made rich, to give good care to the corn and then note results with each kernel. In a paper, later they are to give an account of their experiment.

JAY A. LAPHAM,

Mitchell County.

\*\*\*\* We adopted Eggert's Hrofessional Farming as a text on the subject a few years ago \*\*\*\*. Have left the matter of teaching the subject optional with the teachers \*\*\*\*. There has been no uniformity in the instruction \*\*\*\*. I sent out several pounds of seed corn to all boys of the county from 15 to 19 years of age that cared to receive it \*\*\*\*. Many of the boys raised some excellent corn and made good reports. As a result many boys are interested not only in the growing of corn but in other subjects of agriculture and the farm in general. We sent out corn for several years and the results have been good \*\*\*\*. I believe that it is practicable to teach agriculture in the schools but do not think that it can be taken up very well as a separate study each day. The course of study as now outlined, it seems to me, is too full for that.

F. E. LARK,  
Monona County.

I believe it is very desirable but entirely impracticable as matters now stand. If the teaching can be done by an expert or some one or more persons who will make no serious blunders, and who can create a lively interest in good practical questions relating to this great subject, it will be of immense value to our rural districts \*\*\*\*. Our agricultural college at Ames should be the adviser and leader in this movement. It should be the authority on this subject.

F. M. WITTER,  
Muscatine County.

Some work has been done in connection with nature study. I believe it would be a valuable subject to include in the rural school course. At present we lack teachers competent to do it justice.

J. P. MCKINLEY,  
Osceola County.

I do not believe in making it a distinct branch in the school, but the teacher should know how to correlate the work with the other branches, such as language lessons and geography. The nature study should be along the line of agriculture.

GEO. H. COLBERT,  
Page County.

I do not think the teaching of Agriculture in the rural schools as we have them is practical. We cannot get teachers fitted to teach the subject. When we get rural graded or high schools in the township, the subject should be taught and model gardens or fields sustained.

U. S. VANCE,  
Pocahontas County.

Beyond placing elementary works on agriculture in rural school libraries, and arousing interest in the subject in a general way, I see no possibility of doing anything in a permanent way in the matter until our teachers are prepared to teach the subject.

The desirability of such instruction cannot be questioned, if done in such a way as not to interfere with thorough work in the fundamental branches.

P. A. MCMILLEN,  
Poweshiek County.

Agriculture should be made the bases of work in nature study. The subject needs attention. Should be done in connection with other work. Do not make it a special subject.

O. J. MCMANUS,  
Pottawattamie County.

I am strongly opposed to the introduction of any more branches of study as such, so long as the program of the rural school is overcrowded as now and the teachers incompetent to handle the subject matter. \* \* \* It seems to me that more of the reading matter used in the school should be based on agricultural subjects, and that somewhere in the course a good text on agriculture should be carefully read and discussed by one of the reading classes.

W. E. CHASE,  
Sioux County.

During the spring term a number of our teachers took up the subject in their schools in general classes. It is proving very practicable and profitable. I believe the time is here when we should begin to teach our boys and girls of the farm some things pertaining to the farm and farm life.

D. E. BROWN,  
Tama County.

I am opposed to teaching agriculture as a special branch and consider it impracticable. The course is already overloaded and I am in favor of covering less ground and doing it better. \* \* \* I would have the teachers better prepared on what they are now teaching rather than prepare on additional subjects.

A. L. HEMINGER,  
Van Buren County.

The teaching of Agriculture in the rural schools brings the home and the school nearer together. It creates a feeling on the part of the pupils that a higher education is needed by persons who control the farms of our country.

CORA E. PORTER,  
Washington County.

I am not particularly in favor of adding it to the already overcrowded rural school program. I am a firm believer in township high schools, and believe that in these schools it can, and should be taught. A class of young people of the age of entrance to a township high school can profitably study the work in its various phases. In the lower grades it would be only another form of the much-abused "Nature Study."

A. L. BROWN,  
Webster County.

I am of opinion that the study of agriculture as it would have to be presented with unprepared girls as teachers is not a thing to be desired. Encourage it but do not impose it as a legal obligation.

E. J. HOOK,  
Winneshiek County.

I do not believe that the introduction of elementary agriculture into the public schools, to be made a special branch, would be practical or

advantageous. Neither do I believe the function of the public school is to make farmers, carpenters or butchers.

If the work of our public schools fits the pupil to educate himself by a competent study of books and his own individual power of observation it has perhaps fulfilled its mission.

There must be something left for the home education and it appears to me with the small amount of illiteracy existing in our state that the dissemination of knowledge so beneficial to our farm population may be carried on through the press at far less expense and be of far more value to farmers and farmers' children than by trying to reach them through the channels of the public schools.

Let the state establish a bureau for the distribution of leaflets from our college of agriculture. By this means every farm home may be supplied with information from a reliable and scientific source where it may be used in a practical manner.

L. C. BROWN,  
Winnebago County.

In a distinctively agricultural state where more than 97 per cent of the land area is devoted to farming and where over 56 per cent of the total population lives on the farms, it is nothing but meet and just that the elements of agriculture should be taught in the rural schools.

Every rural child has a right to be taught the value, name, and nature of the different soils, plants, insects, and domestic animals.

The pupils of the rural schools should be given an opportunity to learn more about the occupation which perhaps more than 90 per cent of them will follow.

O. E. GUNDERSON,  
Worth County.

For three years we have had agriculture taught in the institute in connection with nature study. We are not over-doing it, but we are getting many of the pupils interested in the book of life. \* \* \* Teachers and pupils are doing field work and I think that many are learning

ANGUS MACDONALD,  
Wright County.

#### BOY'S AGRICULTURE CLUBS AND GIRL'S HOME CULTURE CLUBS.

Closely allied with the movement for teaching agriculture is the organization of boys' agriculture clubs and girls' home culture clubs. This movement has gained considerable proportion in a number of states, and is particularly praiseworthy since it requires personal effort out of school hours, and encourages observation and reflection.

In Iowa the first club was organized by County Superintendent Miller of Keokuk County. At present 511 boys in this coun-

ty are members of the agricultural club, and 407 girls are members of the home culture club. In Iowa County the boys' club numbers 141, and the girls' club 165. So far as reported, but the two counties mentioned have these clubs in Iowa.

The following outline prepared by County Superintendent Ports of Iowa County will indicate the scope of the work. This outline is for the months of May, June, July and August.

#### FOR THE BOYS' AGRICULTURAL CLUB.

1. Weigh all the milk of two cows for a week. Why does one give more milk than the other? Does she eat more?

2. Make a garden six feet square of good ground. Sow radishes, lettuce and spinach. Plant one potato, two cabbages, one cucumber, two bush beans, two tomatoes and a few peas. Train the tomato to a stake and keep trimmed. Lay vines over the edge of the garden as much as possible. Keep clean of weeds. Keep record of time of sprouting, blossoming and fruiting.

3. Plant one currant bush, one cherry tree, one raspberry bush, one grape vine, and one shade tree. Keep clean of weeds. Plant one shade tree at the side of the school yard and take care of it. Make a record in the register of the date, kind of tree, height and name of pupils helping.

4. Cover a half dozen ears of corn with cloth or heavy paper sacks. Do this as soon as the silk starts. Have the sacks long enough to give the ear plenty of room and tie loosely about the stalk so that no dust can reach the ear. Plant a hill of corn alone in the garden at least ten rods from any other corn. Note effect on ear.

5. Count all the good heads of oats on a spot of ground a foot square. Count all the blasted heads on the same spot. Do this on five such spots and calculate the percentage of smut in the field, and the loss per acre in bushels.

6. Find a place where white and yellow corn are growing side by side. And then find where there are the most mixed kernels—at the butt of the ear, along the middle, or at the tip.

7. Find the greatest number of oat stalks growing from a single root.

8. Make notes on growth from the buds marked on the grape vine or apple tree. Care for the flower bed and keep a record of how many flowers you grow.

9. Collect flowers, leaves or small plants that interest you. Put them between several thickness of newspapers. Put one above another with a board on top, and put on brick or stone to press them. Open

and change papers every day or two until they dry, then lay away between sheets of plain paper, such as is used at the store for wrapping parcels. If you want to do it the best way have the sheets  $11\frac{1}{2} \times 16\frac{1}{2}$  inches. Bend the plants to this size before drying, then when dry fasten to the plain sheet with strips of court plasters or sew on with thread. Also write in the corner of the sheet the following:

Date .....  
 Name of collector .....  
 Name of plant .....  
 Where found .....

10. Visit the flock of sheep at shearing time and take the weights of at least twelve fleeces. Which shears the longer wool, a lamb (yearling) or an old sheep? Where will the ticks go when the sheep are shorn? What is to be done about it?

11. Plant a little corn out of doors, if not more than one hill, and measure and keep a record of growth each week. Do not stretch up the leaves, but measure as it stands naturally.

12. Collect and describe the blossom of wheat, oats, clover, timothy, and corn. In how many ways do they differ? Which are visited by bees, and why? Why are the others not visited by bees? Is it of any consequence to the plant to be visited by bees?

13. Find out whether grass blades grow from the point or from the base.

14. Study the horse and dog and learn which is the more intelligent; which shows more anger, fear, affection? Keep written notes and prepare a written report.

15. Watch the garden and the trees. Flowers are staminate and pistillate. Staminate flowers shed a fine dust, pollen, when ripe. The tassel of corn is the staminate flower and the silk is the pistillate. In how many ways is the pollen brought to the pistils of the flowers in different plants?

16. What is the largest number of good grains in a head of wheat? Of oats?

17. What should each crop yield per acre as grown in your neighborhood?

18. Work extra time and raise an acre of some crop if possible. Do all the work yourself and pay the rent for the land. Sell the crop and with the money buy pigs or sheep. Feed and sell these and in this way start a fund to be used for books or in going to school.

19. Dig up a clover plant in the growing season. These little swollen points that you see on the roots, called nodules or tubercles, are the home of bacteria, which, in their growth, take the nitrogen from the air. They live but a short time, and at their death this nitrogen is

available for common plants, which need large quantities of nitrogen, but being unable to get their own supply from the atmosphere are entirely dependent upon the soil supply, which is never large and is soon exhausted by cropping and by rains. Large crops can not be raised, therefore, unless this soil nitrogen be kept up. To do this by buying nitrogen in the form of fertilizer will cost fifteen cents a pound, and it will require over four pounds to grow a bushel of wheat. It can be secured for nothing, by growing occasionally, on every field those crops that are able to get nitrogen from the air through the tubercles on their roots. Only certain plants can do this. All others consume nitrogen without producing it.

Look carefully at the roots of all farm crops and determine which have nodules and which have not—then you will have classified crops into nitrogen producers and nitrogen exhausters.

Read chapters 3, 4, 5 and 6, Agriculture for Beginners.

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#### FOR THE GIRLS' HOME CULTURE CLUB.

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Nos. 1, 2, 3, 8, 9, 12, 13, 14 and 15 the same as for boys.

#### STUDY.

1. Furnishings—From standpoint of hygiene and expense. Treatment of floor, carpet, rugs. Amount and kind of furniture desirable, necessary. Original devices. Bedding, kind, quality. Knowledge of values in cotton cloth, mattresses, springs, blankets, etc.

2. Decorations—Harmony and color. Over decoration. Simplicity for hygienic and artistic reasons. Articles for needle work confined to useful articles. Value of time an element. Suitable pictures, subjects, kinds, expense. Knowledge of originals of pictures and artists who produced them.

Work cover for dressers and washstand. Other necessary articles not before mentioned in outlines, such as quilts, laundry bags, pin cushions, sponge case, etc.

We would like to have exhibited at our School Exposition this fall, sheets, pillow cases, dresser and sash stand covers, and all other articles made by the girls.

Read chapters 3, 4, 5 and 6 of "Letters to a Daughter."

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#### THE KINDERGARTEN.

The following table shows the number and location of the free public kindergartens in Iowa. The time must come when

the kindergarten will be recognized as an essential part of the school training of children. The movement is slowly, but surely, gaining ground.

It is a pleasure to announce that we now have a well equipped kindergarten in connection with the State Normal School where teachers are being trained for this department of school work.

## PUBLIC KINDERGARTENS.

Corporation.	No. Schools.	No. Teachers
Burlington .....	6	8
Cedar Rapids .....	4	8
Charles City .....	1	2
Council Bluffs .....	11	17
Oreston .....	4	8
Denison .....	2	2
Des Moines-West .....	21	24
Dubuque .....	7	14
Glenwood .....	2	2
Harlan .....	2	2
Hawarden .....	1	1
Ida Grove .....	1	1
Jefferson .....	1	2
Manchester .....	1	2
Marshalltown .....	7	.....
Mt. Pleasant .....	2	6
Onawa .....	1	1
Oskaloosa .....	5	5
Pella .....	2	2
Sac City .....	1	2
Sheldon .....	1	2
Villisca .....	1	1
Vinton .....	2	2
Washington .....	1	2
Waterloo-West .....	1	2
Webster City .....	1	2

## KINDERGARTEN AT THE STATE NORMAL SCHOOL.

HARRIETT ELIZABETH GUNN, DIRECTOR.

With the beginning of the school year of 1904-1905 the board of Trustees organized a training school for kindergarteners. The kindergarten opened in the fall with a large class of students and the Training school kindergarten full of children. Two beautiful rooms were set apart for this work and each fully equipped with latest material.

The growth of the department has been so great that with the opening of the year 1905-1906 it was necessary to enlarge the department by equipping another room and providing an additional teacher.

The aim of this department is to qualify efficient teachers for positions in private and public kindergartens where superior skill and scholarship are required.

The kindergarten course comprises the three main requisites of a woman's education.

It gives broad liberal culture.

A technical training for a practical vocation.

Preparation for woman's highest destiny—the ideal training of childhood.

Two courses are offered:

I. Three-year regular course. This is for students who are not high school graduates.

II. Two-year high school graduate course.

1. In the regular course the following studies are taken:

#### First Year.

A	B	C
1. Vocal Music. English Grammar.	1. Arithmetic. Vocal Music.	1. Drawing. Geography.
2. Economics.	2. Penmanship and Bookkeeping.	2. Algebra.
3. Principles of Education.	3. Methods.	3. Methods.
4. Algebra.	4. Algebra.	4. English Composition.

#### Second Year.

A	B	C
1. U. S. History. Drawing.	1. Physiology. Drawing.	1. Civil Gov't. Reading.
2. Rhetoric.	2. Psychology.	2. Psychology
3. Kindergarten.	3. Kindergarten.	3. Kindergarten.
4. Kindergarten.	4. Kindergarten.	4. Kindergarten.

Physical Training and Literary Society Work.

#### Third Year.

A	B	C
1. School Management.	1. Physics.	1. Physics.
2. Kindergarten.	2. Kindergarten.	2. Botany.
3. Kindergarten.	3. Kindergarten.	3. Kindergarten.
4. Manual Training.	4. Manual Training.	4. Kindergarten.
	Literary Society Work.	

## II.—HIGH SCHOOL GRADUATE COURSES.

## First Year.

A	B	C
1. English Grammar. Vocal Music.	1. Arithmetic. Vocal Music.	1. U. S. History Drawing.
2. Economics.	2. Psychology.	2. Psychology.
3. Kindergarten.	3. Kindergarten.	3. Kindergarten.
4. Kindergarten.	4. Kindergarten.	4. Kindergarten.

Physical Training and Literary Society Work.

## Second Year.

A	B	C
1. Drawing. Physiology.	1. Algebra.	1. Physics.
2. School Management.	2. Physics.	2. Physiography or Am. Gov't.
3. Kindergarten.	3. Kindergarten.	3. Kindergarten.
4. Kindergarten.	4. Kindergarten.	4. Kindergarten.

Physical Training and Literary Society Work.

The kindergarten studies are the same for the two courses.  
Following is the list.

## Junior.

Mutter and Kose Lieder.  
Gift and Occupation.  
Stories and Juvenile Literature.  
Music, Games and Songs.  
Program work.  
Teaching in Training School Kindergarten.

## Senior.

Mutter and Kose Lieder.  
Gift and Occupation.  
Kindergarten Principles.  
Mothers' Club Work.  
Principles of Program work.  
Practice in Training School Kindergarten.

The Training School Kindergarten has been crowded to its utmost capacity. At times there have been as many as twenty children waiting to come in. Each child is making a doll house of wood, containing five rooms. They expect to furnish these completely with furniture of their own manufacture. Great interest has been taken in this department, the visitor record showing three thousand guests during the past year.

## MANUAL TRAINING AND DOMESTIC SCIENCE.

While Manual Training is firmly established in but a few Iowa schools, the outlook for the future is encouraging. The need of such training is widely recognized, but two principal difficulties have stood in the way of its rapid extension:

First, there has been a dearth of thoroughly equipped manual training and domestic science teachers, and

Second, the popular impression has been that the expense incident to this kind of instruction is very great.

The first named difficulty will soon be in large part overcome, since a well equipped manual training department has within the past two years, been opened at the Iowa state normal school, where a large number of young men and young women are preparing themselves for this special work, while a domestic science department has been established both at the state school at Ames and at the normal school at Cedar Falls.

That the second objection is far less formidable than many suppose is shown from the following tables:

## MANUAL TRAINING IN IOWA SCHOOLS

FOR PROCESSES TAUGHT SEE NOTE BELOW

NAME OF CORPORATION	When Introduced	Number Special Rooms for Woodworking	Benches			Cost of Tools and Mach'n'y		Cost of Lockers, Cabinets and Fixtures	In What Grades	Number Taking	Material		No. schools using rooms What Grades do Woodworking
			Number of	Designed for How Many Pupils	Cost of Each	Set of Individuals	General				Do Pupils pay for it...	Cost Per Pupil Per Year....	
Burlington.....	1905	*	20	1	\$12 00	\$6 25	\$ 40 00		* 8-10 all	110	no †	12 none	
Carroll.....	1901	**											
Cedar Rapids.....	1904	2	30	1	10 00		200 00		† 6.12	510	no	\$ 70 5 none	
Clinton.....	1903	1	21	1	7 00		855 00	\$200 00	7.12	155	no	3 00 none	
Davenport.....		1	10	2					9-12	360	no	14 yes	
Decorah.....	1901	1	5	4	10 00		10 00	25 00	7-8	225	yes	2 50 24-6	
Denison.....	1905	1	16	1	25 00		4 00	45 00	9-12	75	no †	non	
Des Moines													
North High.....	1902	1	22	1	6 00	3 25	350 00	20 00	9 12	24	no †	1 50? 3 no	
West High.....	1888	1	17	1	25 00	3 25	1000 00	200 00	9-12	205	no †	1 50? 8 no	
West Grades.....	1895	5	20	1	6 00	none	650 00	5 00	7-8	600	no	35? 8 no	
Dubuque.....	1904	1	20	1	26 13	\$	205 00	125 00	8-12	137	no	50 1	
Ida Grove.....	1903	1	15	1					9.12	60	no †	no	
Iowa City.....	1895	1	10	2	30 00	9 50	1050 00	50 00	5.9	300	no †	50? 6 no	
LeMars.....	1905	1	12	2	13 50	5 10	140 00	50 00	7-8	90	no	40 0 no	
Marshalltown.....	1902								all	2250	yes	10? 46-7	
Mason City.....	1890	2	14	1	2 8 00		300 00	50 00	7-12	170	no †	1 00	
Missouri Valley.....	1904	1	15	1	15 05		75 00	20 00	9-12	50	no	2 00 7.8	
Montezuma.....	1903	1	12	1	17 00		40 00		8.12	78	no †	50	
Oelwein.....	1904	1	1	1	18 00		55 00		9.12	75	no †	4 00? 5	
Onawa.....	1905	1	10	2	10 25		93 00		9-12	24		No	

\* Special building in preparation. † For work outside of course or to keep, yes

‡ Book Closets are used. § Bench and set

| Below seventh grade 40 cents ¶ Made by students x For 13 pupils, benches for 2, 3 and 4.

\*\* The manual training in this school differs essentially from that done in most schools maintaining a manual training department. The work is offered to all the pupils by the regular teachers under the skillful direction of the city superintendent. The work is all voluntary and consists of knitting, darning, all forms of sewing, quilting, caning chairs, making brushes, telescopes, flower pots, vases, etc. Pupils and teachers are deeply interested and much of the work is done after school hours. The cost is practically nothing, since remnants from dry goods stores, cast off garments and other materials that have little commercial value are utilized.

NOTE:—Processes taught. Advanced; lathe work; Burlington, Clinton, Davenport, Des Moines

West High, Ida Grove, Iowa City, Mason City and Missouri Valley.

Pattern making; Davenport, Des Moines West High. Mechanical Drawing, Cedar Rapids Mason City. Carving, Cabinet Work: Des Moines North High and West High, Mason City and Missouri Valley. Elementary Processes: The elementary processes taught are practically the same in all schools offering work in the lower grades and includes paper cutting, weaving, basketry, cardboard work and braiding, while a few offer iron work, wood word and leather tooling.

## DOMESTIC SCIENCE IN IOWA PUBLIC SCHOOLS

CORPORATIONS	When Introduced	Sewing Room	Kitchen	Tables or Desks	Individual Equipment.	Cost of Furnishing		Lockers	In What Grades	Number of Pupils	Cost of Material	Do Pupils Pay for Material	Number Using Special Rooms	Does Work Include Weaving and Basketry
						Sewing Room....	Kitchen.....							
Burlington.....	1905	yes	yes	13 *	yes †	\$ 76 00	190 00	\$16 00	8-10	145	no †	no	no	no
Clinton.....	1903	yes	no	3 ‡	yes	\$209 00		**	7-8	200	no	no	yes	
Davenport.....	1888	no	yes	18	††		100 00	no	9-13	511	***	no	all	no
Des Moines—East....	1905	no	yes		no					90	\$ .30	no		no

\* Sewing room 9, kitchen 4; 4 pupils at a table.

† Kitchen equipment cost \$2.75. Sewing equipment furnished by pupils.

‡ In sewing, yes.

§ Seating eight pupils.

\*\* "We have a case divided into 250 pigeon-holes, each numbered and containing a box numbered to correspond. This provides a place large enough to hold an apron and model book,"—From report of special teacher.

\*\*\* This school spent \$240 for sewing machines last year and \$20 additional for supplies. Pupil do not furnish material except for articles kept by them.

†† Not entirely.

## THE PLACE OF DOMESTIC SCIENCE IN PUBLIC SCHOOLS.

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BY GEORGETTA WITTER, AMES:

There is a growing appreciation of Domestic Science in our public schools. This is evidenced by its introduction in so many new places, but there is also a skeptical attitude in the minds of many as to its value; a tendency to class it among "fads," to regard it as one more of the new subjects that are over-crowding the curriculum. Professor Kinne says, "Even among superintendents, general teachers, and parents, who are its friends, there is a lack of formulated opinion as to its value, and a tendency to throw responsibility on the special teacher, and consequently there is a lack of vital connection with other school work."

Statistics show that Domestic Science, in some form, is taught in the elementary schools in more than sixty cities in the United States, in High and Manual Training Schools, besides being taught in a number of our Agricultural colleges, Universities and Normal schools—hence the school man who takes time to consider the situation finds himself confronted by an extraordinary economic incongruity—the expenditure of public funds for maintaining a subject, about which he knows little or nothing.

What is Domestic Science? Here are various household arts, such as preparation of foods, making of garments and keeping things clean. In carrying on certain processes, particularly cooking and cleaning, we are working with forces outside ourselves, and when we ask what these forces are and how they behave, we discover that here in these matters of daily life we are applying the principles of chemistry, physics and biology. In other processes, such as sewing, weaving and basketry, we are dealing with form and color and so applying the fine arts in the home. Broadly speaking, our subject is one form of applied science and art.

But Domestic Science is more than the application of science and art merely to the end that certain results may be correctly reached, for we must consider the place of these arts in the social order and this brings us immediately to the thought of the home and its conduct, the home as the place where the individual is given such physical and ethical surroundings that he is made an effective human being, the conduct of the home, on the material side, as the seeking to produce the best results with the least expenditure of energy, material, time and money.

Does society as a whole, show any needs that such a study would meet and answer? What is the reason that such a large proportion of our population is in a poor physical condition? Here is great economic waste, for lack of vigor means lack of effective accomplishment, and also makes necessary large expenditure of remedial measures.

With better shelter, water, ventilation, rational cleanliness and proper clothing, a check would be placed on this enormous waste, more real work would be done, and there would be fewer patent foods, medicines, and hospitals.

Another common waste is through poor buying and extravagant use of materials. To what are these things due? Doubtless to many influences, but potent among them are two: (1) Ignorance of women on these points in the management of the household; (2) Ignorance of men and women together in the management of that larger household, the city. The only way to remedy this, to reach all the people, is through our schools. This is the larger aim.

As regards the educational advantages to the individual consequent upon a right introduction of this subject into the time table, experience offers evidence that children gain increased power of muscular control and expression through the handwork. They become self-reliant and useful to others by the capacity thus evolved, while the variety of occupation is not only agreeable at the time, but conduces to their social value.

The subject also offers excellent opportunities for the development of the relating power, that is, for tracing cause and effect, and for the realization that successful practice depends upon a firm grasp of underlying principles. Luck becomes a myth, judgment as to time is developed, and good taste is formed in regard to color and form, in furnishings and clothing. It becomes apparent to the most self-willed child that in dealing with materials and forces it is not as we please, but as nature pleases, and to control her we must obey her. While, at first sight, it would seem a small matter for pupils to make a loaf of good bread, yet see what it involves. They are free individuals and may do as they please. They may please to pour boiling water on the yeast, forget the salt, refuse to make their muscles work effectively, let the dough stand a length of time convenient to themselves, and fail to manage the oven dampers. What then? Nature has gone quietly on her way and returns to them their just due; their own careless selves expressed in a soggy, dark, sour, ill-haped loaf of bread. We have here in concrete terms the whole matter of the limitation of the individual by his environment. Through a series of such experiences there comes an understanding of what law means, and self-control, obedience and freedom.

Taking the thought and handwork together, the subject gives the school a field where the knowledge and powers gained in other subjects may be applied to practical ends and conversely, it stimulates an interest in other subjects. This idea of application is an essential part of the plan that aims to make a close connection between school and home life.

Here at Iowa State College Domestic Science forms a part of the General and Domestic Science Course as well as the Domestic Science Course. It may, to some extent be elected in the Science Course. Our aim

in the General Course is to prepare our college girls to be good home makers. Our Domestic Science Course is designed to prepare teachers of Domestic Science.

Last year our enrollment in all courses in Domestic Science was over five hundred. The girls spend from four to fourteen hours per week. At present we have forty-five eighth grade girls from the Ames public schools coming to us for instruction in Domestic Science. They spend two hours per week in this work. The cost of material is three cents a child per lesson.

Our public school kitchen was equipped at a cost of \$200.00. This includes individual equipment for twelve girls.

The course as outlined includes a study of fuels, stoves and ranges, making and care of a fire, care of stove, fuel, foods and proper cooking of same. Relation of food to body, care of sink, washing of dishes and care of dish towels. Fats and oils, proper cooking, proteids and cooking. Serving of simple meals.

#### HANDWORK IN PUBLIC SCHOOLS.

BY PROFESSOR CHARLES H. BAILEY, IOWA STATE NORMAL.

It is the purpose of this article to point out a few of the most important things which it is believed that manual training in the public schools should stand for and accomplish, and to offer some suggestions as to the actual work in the different grades. Nothing beyond a bare outline of the argument can be presented in the space available here; no attempt will be made to elaborate the points set forth.

It is probably a generally accepted theory that education should be a fitting of the individual for life, and an actual training in living. Modern education should be a preparation for modern life and a training in modern living; in this country it should be a preparation for life in a democracy—for citizenship in a country and at a time in which citizenship means more than at any other period of the world's history or in any other country on the globe. It is the function of the school as a factor in education to do its part toward making this preparation complete and effective. If this is true, the work of the school should be based upon a study of the demands that civilization and society makes upon the individual—by a study of the environment.

One of the most significant factors in present-day life is the element of industrialism. This is an age of industry—a time in which a large majority of those persons who are engaged in gainful occupations are concerned in the doing of things with their hands. The figures of the United States Census Reports show this to be true. More than ever before in the history of the world, thought and energy are being directed along those channels and toward those things that make for economical

production and application of power, for rapid transportation, the development and improvement of machines and mechanical appliances, the securing of easy and immediate communication, the working out of better methods of heating and lighting of buildings, greater ease of production and increased output of all sorts of manufactured articles—in fact, the whole industrial problem is occupying the attention of the world as never before.

A large majority of the pupils of the public schools will at some time have a place and a part in this industrial movement, and the school should in some measure prepare the pupils for this work by bringing into the school the elements of these industries—by giving the pupils training in the actual making and doing of things that have a relation to this whole field of construction and the constructive arts. From this point of view, manual training in the public schools should serve to represent and interpret to the child the art and industry of modern civilization. Perhaps only a few things can be done, but these may be typical and illustrative of the larger things of real life. The handwork in the schools should be planned with this in mind and much that is done should bear a vital relation to, and serve to interpret faithfully this phase of the child's environment.

There are other tests to which handwork in the schools should measure up. The work done should be of value to the child, should be appreciated by the child so that he will have a motive for its accomplishment. Unless this motive is present in the doing of the thing—a motive on the part of the child, not that of the teacher, a large part of the value of the work will be missed. This means that the things made should appeal to the child himself as reasonable and desirable things to make. They must be a part of the life of the child, must be the art and industry of the child's life, while at the same time they represent the art and industry in the world around him.

The work done should be an expression of the child's own thought. One of the chief values of handwork is to be found in the fact that, when properly performed, it is a means of thought expression, of expression in a natural, concrete way. This fact must be remembered, particularly when working with the young child. We are told by psychologists that no mental act is complete without corresponding reception and expression. The carrying out of a thought into action is a necessary complement of every complete mental act. The element of action is as important as that of reception. Experience with the young child teaches that doing things, making things, representing things in material, concrete forms is a natural means of expression, the most natural. Handwork in the schools should be such an expression of the child's thought.

A study of the development of children teaches that working with the hands is not only a natural means of expression, but that most of the child's knowledge of the things around him is gained through actual contact with these things, through the motor centers, through manipulating

things, handling things, doing things. He is an active, not a reasoning being. Consequently, handwork for the young child should be the rational activity that has for its purpose the initiation of the child into its surroundings—an introduction to all the facts of life with which he comes in contact and a means of gaining knowledge concerning them. It should compose a large part of the school work of the young child.

A large part of the work done should have a value in itself—a subject matter value. Some things may be done merely as a means of expression and representation, but processes may be chosen that are worth while to learn as processes, and the work done be of real value, at the same time fulfilling other conditions. The subject matter value of this work must not be lost sight of in the emphasis upon its training and developmental value, nor must the subject matter value be the whole consideration as has been the tendency at times.

Manual training has its chief value when it is correlated in a vital way with the other work of the school and not taught as a thing apart. It may be brought into immediate connection with the work in arithmetic, reading, history, geography, nature study, etc., and made to vitalize these things, bringing to them a new interest and a new meaning. This correlation should be made wherever it can be done in a natural way, but it is a mistake to attempt to correlate in an artificial manner merely for the sake of correlation. Handwork has a value in itself, aside from its connection with other things, and its use that way may be justified, but when a natural correlation with the other work can be made it adds to and strengthens both the handwork and the subjects with which it is connected.

As a child grows older and develops, he is able to better appreciate relationships and to reason from cause to effect, consequently handwork with him begins to have a different meaning. He is better able to realize the value of the process for its own sake—for the skill he acquires and the possibility of applying this skill to practical uses. He is able to see the work in its relation to some future occupation or need, and thus it becomes to him more of a means to an end and not simply an end in itself as it is to the younger child. Thus we are able at this stage to give more attention to the details and technique of the process, and the whole work becomes more specialized. For this reason, the work done in the upper grades and the high school differs in character from that in the lower grades, and also, to some extent, in motive and in the method in which it is conducted.

In the following paragraphs will be found a brief outline of the forms of handwork that may be introduced into the different grades and something of the way in which it may be conducted.

It is generally considered that the manual training work in the grades below the seventh must be done in the grade room by the regular teacher, while that above the seventh grade must usually be done

in the special room under the instruction of the special teacher. There is no very uniform practice in this regard but the limitations of ordinary school conditions seem to confine the work of the special teacher to the upper grades.

Since the work in the lower grades must be done in the regular school room at the ordinary school desk, the processes introduced must be such as do not require elaborate or expensive equipment and must be capable of being done at the school desk. Some of the things that may be done in the different grades under these conditions are given below.

**First and Second Grades.**—Paper cutting and folding; clay modeling; sewing; simple weaving with rags, raphia or yarns; cord work; illustrative work on the sand table; painting and drawing.

The paper work, drawing, modeling and sand-table work may be connected with the work in reading by using them as a means to illustrate stories read, and to make things spoken of in the stories. Cardboard work and weaving may be used as an aid to the study of arithmetic, weaving may be connected with the stories in history, and the sand table be used to teach something of local geography. There are many opportunities to correlate the handwork in these lower grades with the other work of the school.

**Third and Fourth Grades.**—Cardboard work; weaving; making mats, handbags, hammocks, baskets, etc. from raphia and other pliable materials by braiding and sewing, knotting, weaving, etc.; making simple baskets of reed and of reed and raphia combined; simple knife work in thin wood; clay modeling; sewing; painting and drawing. Where possible, this work should be correlated with the regular work as suggested for the first and second grades.

**Fifth and Sixth Grades.**—Card board work, using heavier and stiffer materials and making more substantial articles such as boxes, portfolios, book covers, etc.; knife work in thin wood; basketry, using reeds and splints; bent iron work; leather work. Bench work in the special room may be given with profit if it can be arranged.

**Seventh and Eighth Grades.**—Wood work in the special room; leather work; sheet-metal work. Sewing and cooking for the girls.

**High School.**—Bench work; wood turning; pattern making; forging; foundry work; machine shop practice; mechanical drawing. Cooking and sewing for the girls.

The work in the high school requires expensive equipments and few schools are able or willing to expend large sums of money on this specialized work. Much can be done in the grades, however, with little equipment and at small expense, and inasmuch as handwork as an educative process has its greatest value in the lower grades, that phase of the work may well first occupy the attention. The course of study

can be greatly enriched in these grades by the wise introduction of some forms of handwork.

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## MANUAL TRAINING AND DOMESTIC SCIENCE IN THE IOWA STATE NORMAL SCHOOL.

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The Iowa State Normal School at Cedar Falls, recognizing the increasing prominence given to the manual arts in the public schools and appreciating the demand for teachers trained to give instruction along these special lines, has established a Department of Manual Training and Domestic Science in order that its students may have an opportunity to thoroughly prepare themselves to take positions as supervisors and teachers of these special branches. Special diplomas are granted which exact the same high standards of scholarship that obtain in the requirements for the regular diplomas but give recognition to the special training which these courses involve. These special diplomas, Director of Manual Training or Domestic Science and Teacher of Manual Training or Domestic Science, are equivalent in standing to the regular diplomas and require respectively three years' and two years' work beyond a regular high school course.

The courses leading to the special diplomas in manual training involve, besides the constants for the regular courses, about two years of special manual training work which includes a thorough technical training in the various processes that are being introduced into the schools as forms of handwork, and also a study of the history, theory and practice of manual training, together with problems of organization and methods of teaching.

Special equipments and suitable apartments have been provided for giving instruction in mechanical drawing, bench work in wood and in wood turning. Provision will be made later for giving instruction in metal working. Instruction is also given in those forms of handwork such as paper and cardboard work, string work, weaving, clay modeling, raphia and reed work, sewing, leather work, bent iron, book binding, etc., which are adapted for use in the elementary grades.

The mechanical drawing room is equipped with twenty-one adjustable drawing tables with a full set of instruments for each table. These instruments are furnished to the students without charge. The total cost of this equipment was about \$435.00.

The room for bench work is furnished with twenty-one individual benches with rapid acting vises, each bench containing a set of tools such as are most commonly used. In addition to these individual tools, a set of general tools is provided composed of those for which there is only an occasional demand. There are also convenient tool cases and lockers for the students' work. The total cost of the equipment for this part of the work was about \$645.00.

In the wood turning room are four Reed lathes of four foot bed and ten inch swing operated by individual motors. Each lathe has a full complement of turning tools. More machines will be added as they are needed. The cost of this equipment was about \$485.00.

The equipment provided is somewhat more complete and expensive than would be necessary for similar work in the public schools. This is done that the students may have experience with ideal conditions, and in order to secure the greatest efficiency.

For the work in manual training for elementary schools little equipment is needed, and the students pay for all material used.

The diplomas in domestic science have the same standing as those in manual training and involve an equivalent amount of special work.

Convenient rooms and adequate equipments have been provided for giving technical and practical instruction in sewing and cooking. Theoretical courses in the study of food materials, house sanitation, household management, etc. are also given.

It is the purpose of this department to prepare its students to become teachers of domestic science, not merely to give lessons in sewing and cooking. The courses are planned to make this preparation as thorough as possible.

Manual training and sewing are being taught in the upper grades of the training school connected with the normal school, and it is purposed to introduce handwork into all the grades as rapidly as possible. Thus opportunities are afforded the students to observe this work in actual progress and to do practice teaching.

The interest in these special courses as evidenced by the number of students enrolled is very gratifying. About fifteen are taking courses leading to a special diploma in manual training, five are taking courses leading to a special diploma in domestic science, while a large number are taking electives in these branches. Electives in this department to the amount of one year's work will be credited to candidates for any diploma on the same basis as electives in any other department. The enrollment in the various courses since the opening of the department is given below and indicates something of the interest in this special work.

Fall term, 1904. Mechanical drawing 9, woodworking 27, sewing 16.

Winter term, 1904-1905. Mechanical drawing 20, woodworking 46, elementary manual training 68, sewing 12, cooking 12.

Spring term, 1905. Mechanical drawing 27, woodworking 42, elementary manual training 25, sewing 12, cooking 10.

Summer term, 1905. Mechanical drawing 8, woodworking 13, elementary manual training 138, sewing 8, cooking 3.

Fall term, 1905. Mechanical drawing 14, woodworking 23, elementary manual training 120, wood turning 9, woodworking for training school boys 34, sewing 7, cooking 19, sewing for training school girls 42.

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## THE JUVENILE COURT LAW.

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The end sought in the Juvenile Court law viz., the saving of unfortunate children from vicious surroundings and the reclaiming of delinquent ones from lives of crime, is of the greatest importance to the state. It is doubtless true that the law, for the short time it has been in force, has not fully met the expectations of its friends. But there should, in my judgment, be no thought of its repeal at this time. There should be sufficient time given in which to test its efficiency and if weaknesses are apparent, they should be promptly removed by amendment.

For the first fourteen months the law was in force, 287 cases under it were tried, 43 counties being represented.

That the practical workings of the law might be set forth by persons best qualified to express an opinion, I have asked the Judges of the district courts where cases under the law have been tried, to give their impressions of its value, and have invited suggestions as to how it could be strengthened so as to better accomplish the purposes for which it was intended.

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## COMMENTS OF DISTRICT JUDGES.

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HON. A. H. McVEY, 9th DISTRICT.

This law has been administered by me in this county during the year 1905, and a great many juveniles have been arrested under it and dealt with during this time. I am clearly of the opinion that the law is a very beneficial one. Criminals of both sexes are made out of the neglected and abandoned boys and girls. Crime will never be reduced to its lowest terms until the state takes hold of the problem at its source, and stops from becoming criminals the boys and girls which it should protect, educate and direct. This law enables the courts to take charge of this class of children. The defect in the law is that there is no pro-

vision made for the expense of its administration. If the law shall be so amended as to enable the proper authorities to levy and collect a tax for the administration of the law, and for the establishment of detention homes, it will prove in my judgment the most beneficial law that has been enacted for many years. I am very much impressed with the fact that this law with some few amendments will prove very efficacious in the saving of children who would otherwise be added to the criminal classes.

HON. F. M. POWERS 16th DISTRICT.

We have no place for the detention of juvenile offenders, pending trial, and until such a place is provided, the law is not practical.

HON. MATTHEW CLEMENT MATTHEWS 19th DISTRICT

I am firmly convinced of the necessity of such a provision of our statutes, and the great advantages to be derived by the persons, whom it is intended to benefit by an intelligent application of its provisions.

The change that I would suggest in the law, is that the probation officer be paid a salary of at least \$50 per month in cities of more than twenty thousand population; \$25 in cities of more than ten thousand population; \$12.50 in cities of more than five thousand population, and in counties where there are no cities of more than five thousand, \$10 per month.

HON. G. W. BURNHAM, 7th DISTRICT.

I find many features of the law which are to be commended highly and it seems to me that it is a movement in the right direction to reach and care for the young who may be found under such circumstances and surrounded by such environments as must necessarily lead to crime and make them criminals, if not properly dealt with, and I believe the provisions of the juvenile court law furnish means by which they may be carefully treated and put in the way of reformation and led in such a direction as to bring about a reformation and build up character.

It has some defects that should be remedied. First, some provision by which in each community or, at least, in each county, there may be a probation officer with suitable compensation for the time and expense he may necessarily be put to in looking after delinquents and dependents and those who have committed some offense. Secondly, a provision that in each county seat there shall be provided a suitable place where those who may come under the provisions of the juvenile court law may be detained until their cases are disposed of.

HON. JAMES D. SMYTH, 20th DISTRICT.

So far as the workings of the law have come under my observation, the chief difficulty seems to be in the care of the children who are taken into the custody, pending the hearing their cases. \* \* \* I suppose

in time this difficulty will be remedied by provision of suitable places for keeping juvenile criminals between the time of the arrest and hearing of their cases, though I do not know just how the expense of such provision will be met. \* \* \* The officers in my district have experienced considerable difficulty in this regard but in other respects the law appears to have worked well.

HON. J. F. CLYDE, 12th DISTRICT.

It has been beneficial in its operation so far as I have observed it. We have had a little trouble in caring for the children pending the final hearing in some cases.

I believe the state will have to provide a home for dependent and neglected children other than the Industrial School, and not be entirely dependent on Home Societies and individuals.

HON. N. W. MACY, 15th DISTRICT.

It impresses me that the law is cumbersome and causes much delay, trouble and expense in dealing with very trivial matters at times. The District Court is somewhat removed at times from the location of some little offense and it seems like such matters could well be disposed of by a tribunal nearer the people. The law has some advantages and good features. It should be made quite clear that the grand jury has jurisdiction to inquire into charges made against minors and return indictments therein when no proceedings have been had before the juvenile court.

HON. FRANKLIN C. PLATT, 10th DISTRICT.

I have found the juvenile court law inadequate to the necessities of nearly every case that has come to my knowledge, particularly for the reason that I have found it impossible to find a suitable person or institution outside of the industrial Schools of the state, that have been willing to take charge of the children whom I have found it necessary to commit, and I have always been obliged to commit such children to the Industrial School at either Eldora or Mitchellville. In other respects I have no particular fault to find with the law, except with respect to the age limit, which in my judgment ought to be eighteen years in the case of girls and twenty-one years in the case of boys. I have found that a good many cases were beyond the jurisdiction of the court on account of the children being over sixteen years of age. In my judgment there ought to be a "home" established by the state to which children could be sent, who are not vicious or incorrigible, and where they would be cared for pending some other disposition of them.

HON. H. M. TOWNER, 3rd DISTRICT.

I have only one suggestion to make; Sec. 6 of the act provides for the appointment of probation officers and prescribes their duties, but

says: "Said probation officers to receive no compensation." I have found in specific instances that persons appointed have resigned because of this provision. I would suggest that this be changed to allow the court to fix compensation to be paid out of the public treasury for services rendered or expenses incurred, in the same manner as is now done by the court in fixing compensation of guardians ad litem, etc.

HON. W. R. GREEN, 15th DISTRICT.

I have been unable to see that the law brought about any change for the better, but it may be too early for the results to show. The provision that juvenile offenders should not be committed to a jail is absurd. We already had a provision that they should not be confined in the same apartments with the older prisoners, and this was enough. It has always been the custom when boys were merely under arrest if not of exceptionally bad character to let them go in the custody of their parents until trial.

HON. J. R. WHITAKER, 11th DISTRICT.

In this judicial district I find that there exists among the members of the bar and among the various district judges that I have talked with, a great deal of confusion as to what the law is or was intended to be. \* \* \* I would recommend that the whole law be referred to the judiciary committee at the next session of the legislature, so that they may re-write it, and make it clear in its provision, and bring it out of its present chaotic condition.

HON. FRANK W. EICHELBERGER, 2nd DISTRICT.

About the only practical change I can recommend is to absolutely repeal the sentimental bosh.

HON. M. A. ROBERTS, 2nd DISTRICT.

I am inclined to favor an amendment thereto providing for the appointment of a probation officer by the board of supervisors and authorizing said board to fix his compensation, the law fixing a maximum amount.

However, I think the law has not been in force long enough to have a fair trial, and would favor leaving it alone at least two years longer before making any amendment whatever.

HON. H. BANK JR. 1st DISTRICT.

I would suggest that some provision be made for a suitable place for the confinement of juvenile offenders. The sheriff has no such accommodations as are required by the law, neither has the probation officer, and I think the County and City should be compelled to furnish quarters which will meet the requirements of the law.

I would also suggest the advisability of giving the Justices of the Peace jurisdiction in misdemeanor cases with authority to refer such

cases to the probation officers who may be appointed by the District Court. The Court is not always in session in any one County and in case of the absence of the Court it makes large expense to transport these juvenile offenders to the place where the Court is sitting, and there appears to be no good reason why the Justices should not have power to act in all cases of misdemeanor.

OPINION OF HON. B. F. COFFIN,

CLERK OF THE DISTRICT COURT, DES MOINES, IOWA.

The law in its present form is ineffective. There should be a detention home, a juvenile officer, judge and clerk at proper salary. It should be amended so as to provide for punishment of parents for neglect of children. I have been informed that there would have been as many more cases if the law as it now stands were effective.

CASES TRIED UNDER THE LAW SINCE JULY 4, 1904.

County.	Number of Cases.	County.	Number of Cases.
Adams.....	1	Linn.....	23
Appanoose.....	5	Mahaska.....	18
Benton.....	7	Marion.....	1
Black Hawk.....	5	Marshall.....	3
Boone.....	1	Mills.....	1
Buena Vista.....	2	Mitchell.....	5
Clarke.....	1	Muscatine.....	1
Clinton.....	1	Page.....	6
Crawford.....	1	Polk.....	90
Des Moines.....	3	Pottawattamie.....	30
Dickinson.....	3	Scott.....	3
Dubuque.....	28	Taylor.....	3
Emmet.....	3	Van Buren.....	1
Fayette.....	2	Wapello.....	4
Hardin.....	1	Warren.....	3
Harrison.....	1	Washington.....	2
Howard.....	1	Wayne.....	2
Jasper.....	4	Webster.....	1
Johnson.....	2	Winnebago.....	2
Jones.....	2	Winneshiek.....	2
Keokuk.....	1	Wright.....	2
Lee.....	9		

SOME SUGGESTIONS TO BETTER THE IOWA JUVENILE COURT  
LAW.

BY MRS. CORA E. HILLIS.

The most progressive development in judicial principles in the United States in the past five years is undoubtedly the establishment of Children's Courts.

The new system of saving delinquent and dependent children by formative, rather than by punitive methods has swept over this country until now twenty-five states and over three score cities have a Juvenile Court Law.

In the limited space at my disposal I cannot discuss the working of the law in Iowa, except to regret that the original bill presented by the Iowa Congress of Mothers was so seriously amended as to cripple its effectiveness. I can only indicate some changes which are based on long study of conditions in other states operating the law, and on wide correspondence with judges and juvenile court workers. I have compiled these needs into twelve suggestions, some of which might properly be separate acts, but all of which are laws in various other states.

1. A Broader Definition of Delinquency as in Colorado and Nebraska, thus giving wise supervisory care to a larger class of children not now receiving help or control, and who if neglected, will eventually fall into serious delinquency. See Colo., Neb., Oreg., Wash., etc.

2. Make it a Misdemeanor to put any child under sixteen years of age in any jail or lock-up, punishable by a fine not to exceed one hundred dollars. See laws of Indiana, Nebraska, Colorado, Tennessee, etc.

3. Provide for a Detention School in counties of 50,000 by separate act (as in Pennsylvania) and for detention homes or rooms in smaller communities by the boards of county supervisors, to be paid for out of county funds in small towns, or specifically by the city councils, making it mandatory to provide a suitable place to detain, train, discipline and care for delinquent and dependent children.

4. An Adult Delinquent Law to provide for the punishment of persons responsible for contributing to the delinquency of children, and punishable by fine not to exceed \$1000 or imprisonment in county jail not to exceed one year. Thus bringing to justice parents or others who encourage children to steal, beg, enter saloons or evil resorts, or otherwise make it easy for a little child to go wrong. A law which has been of wonderful influence in Colorado, Nebraska, etc. etc.

5. Provision for Appointment of Probation Officers by the Juvenile Court which in addition to volunteer officers, shall have in counties of 15,000 one probation officer who shall receive from the county \$3.00 per day for time of actual service.

In counties above 15,000 and up to 50,000, one or not to exceed two officers, shall be appointed who shall receive a monthly salary to be fixed by a majority vote of the board of supervisors. In counties over 50,000, there shall be two probation officers, one of whom must be woman, who shall receive \$1200 and \$1000 annually, to be paid out of county funds, said funds, as all others, for juvenile court expenses to be raised by special levy for such purposes.

6. A penalty for giving or selling cigarettes, tobacco or tobacco paper, cocaine, morphine or any noxious, stimulating or harmful drug to children under eighteen, thus correcting a terrible evil growing among school boys and street boys in every community.

7. Enlarge section 13 to compel parents if able, to support child, or contribute to support after it has been placed in another home, or even in a state institution, thus reaching effectively that class who by swearing to the incorrigibility of helpless children, rid themselves of their support.

8. To section 16 add in summing up the spirit of the law "that as far as possible, any delinquent child shall be treated, not as a criminal, but as misdirected and misguided, and needing aid, encouragement, help and assistance."

9. Increase the age limit to eighteen years, rather than sixteen. Judge Stubbs of Indianapolis truly says that the majority of children brought before the courts are by their habits of life deprived of normal growth, and that at eighteen years of age are often less mature mentally and physically than well cared for children of fourteen or fifteen."

10. Trial of Children's Cases before police magistrates or justices of the peace should also be strictly prohibited, under penalty for so doing, in all towns holding district court. Every child should receive the benefit of all the helps which are best secured in the Juvenile Court proper.

11. Juvenile Court Judges should be allowed extra compensation for extra work incurred, and should invariably hold the children's court in separate chambers from adult cases, withhold names from the press and endeavor to secure for each child the same privacy he would like for his own.

12. Provide for hearing of Juvenile cases in small towns, away from seat of district court by mayor or city attorney, that every child in Iowa shall have immediate attention to his needs without loss of time or money, in transportation or detention, or suffer by a deferred hearing.

Apart from the above suggestions for incorporation into a new law, sentiment should be created for four things:

First. Inauguration of the report system as practiced in Denver, Portland, Indianapolis, etc. If a boy is obliged to sacrifice his inclinations Saturday mornings to report to the court, he gets a feeling of personal responsibility and of the majesty of the law, not gained by probation without personal report.

Second. Special training for probation officers' work is essential to intelligent, efficient service, to the saving of the child to citizenship, and to the permanent upbuilding of his character and environment. Each officer should be given a civil service examination based on educational

qualification, knowledge of child nature, the psychology of childhood, sociology as related to conditions among the poor and the criminal, legal knowledge in the proper conduct of juvenile cases, and above all, an uncommon share of common sense as indicated in replies to questions of what one would do in a given case.

Third. Family ties must not be disturbed until all else fails. While temporary detention of a child may be disciplinary to both parents and children, the permanent removal of a child from his own home should only be resorted to after every effort has been made to correct the environment contributing to the child's delinquency. If parental responsibility and co-operation cannot be secured, after intelligent and patient effort by the probation officer, then the child should be placed in a detention school for a limited period, cleaned up morally and physically, trained to better thoughts, habits, manners and tastes; then put into an approved family home where he can lead a normal child life.

Except in cases of extreme delinquency, no child should be sent to a state reformatory institution until other formative and probationary agencies have been tried.

Fourth. Opportunity for social service and missionary work of the finest type is open to Volunteer probation officers. The Juvenile Court needs scores of earnest business men and women to each look after one or more children.

The list of states having a Juvenile Court law is as follows:

Illinois	Pennsylvania	Tennessee
Wisconsin	California	Georgia
New York	New Jersey	Washington
Maryland	Louisiana	Oregon
Ohio	Iowa	Hawaii
Colorado	Michigan	Texas
Missouri	Nebraska	Connecticut
Minnesota	Utah	District of Columbia
Indiana	New Hampshire	

CIRCULARS OF INFORMATION AND SUGGESTIONS  
ISSUED IN 1904 and 1905.

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*To County Superintendents:*

In keeping with a time-honored custom, I take this occasion to extend to you the greetings of the Department of Public Instruction, and to wish for you the largest possible success in the important office you have been called upon to fill.

The county superintendent may do very much for the advancement of the educational interests of his county, and it is with the hope of assisting the newly-elected county superintendents in particular that the following suggestions are offered:

**VISITATION.** School visitation, if wisely conducted, is of the greatest benefit to teachers and pupils, and I beg to urge that you spend as much time in the schools as you possibly can, consistent with your other official duties. In his visitation, a skillful superintendent will cause the teacher to know that he is her friend and helper. Even in the poorest school, you will find something to commend. A brief mention of the best things observed will open the way to helpful criticism. It is not best to discuss school affairs with the teacher in the presence of the pupils. If a private interview cannot be held with the teacher at the time of the visit, a letter indicating lines of improvement may be mailed, or she may be invited to call at the superintendent's office for conference.

In your visitation you should inspect the school records critically to the end that possible errors be detected and corrected. A careful memorandum should be made of the condition of the schoolhouse, the school grounds and the outbuildings; of the apparatus in use and the provisions for its care; of the number and condition of the books in the library, and the provision made for their protection. I would suggest that, where practicable, you invite one or more of the directors to accompany you on your

school visitation. Certainly you should find some means by which to acquaint the directors with the conditions of the school as you see them.

**TEACHER'S MEETINGS.** There is need of a good school sentiment in every school district. The patrons should always evince a keen interest in the success of the school. The superintendent may do very much to create and sustain a healthy public sentiment toward educational affairs. In his travels over the county he will have opportunity to talk *good schools* to a *few* people; but more people should be reached than is possible in the chance interview. Teachers' meetings held in the different parts of the county, serve as an excellent means to advance educational interests. These meetings should be well planned. Subjects for discussion should be carefully selected and wisely assigned. You should, if possible, be present to put spirit and enthusiasm into the meeting. Prior to the meeting, a card bearing a printed invitation should be sent to every patron in the part of the county where the meeting is to be held. These cards could be sent in quantity to the several teachers and by them given out to the pupils. 2

**APPEALS.** Tact and good judgment, on your part, will enable you, in most instances, to avoid appeal cases. Counsel forbearance and a spirit of conciliation. If you are asked to act as an arbitrator, do so only when you have a written agreement signed by both parties to abide by your decision. An appeal case will usually stir up animosities that will live for years, and always to the detriment of the school.

**EXAMINATIONS.** The licensing of teachers is the most important duty you will have to perform. Your discretionary power in the issuing of certificates is very great. If you are satisfied that an applicant is deficient in scholarship, or of incorrect habits of life, or physically incapacitated to render satisfactory service as a teacher, the certificate should not be issued, and the case should be promptly and finally dismissed.

I heartily commend to you the wise suggestion of my predecessor when he says: "The successful examiner must display

good judgment, great firmness, and be supplied with an abundance of common sense."

Lists of questions will be sent for the months of February, March, April, July, August September and October.

**SPECIAL DAYS.** For a number of years, this department has furnished the teachers of the State special day leaflets for Flag Day, Arbor Day, Decoration Day, and Thanksgiving Day programs. This policy will be continued. We hope to send you, by the first week of February, a sufficient number of the Flag Day leaflet to supply the schools of your county.

**MANUAL FOR IOWA NORMAL INSTITUTES.** A new edition of the Manual for Normal Institutes will be issued and ready for distribution in time for the summer institutes. A copy of this Manual, and a copy of the Hand-Book for Iowa Schools should be in the hands of every teacher under your supervision.

**CONCLUSION.** It is the earnest desire of this department to be helpful to you, and we ask in return your hearty co-operation. Through our united efforts the cause of public education may be greatly advanced within the biennial period upon which we have entered.

JOHN F. RIGGS,

*Superintendent Public Instruction.*

January 9, 1904.

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#### CONCERNING FLAG DAY.

The American public school is a school of patriotism. All its pupils should become well grounded in those civic virtues which make for good citizenship. In no way can this training be so effectively given as in the study of the words and deeds of those, who, in public and private life, have exemplified the best qualities of American citizenship.

While patriotic instruction is in place every day of the year, it is particularly fitting that the anniversary of the birth of Washington be set apart for special patriotic exercises. Let every

pupil commit to memory and repeat on this occasion some patriotic sentiment, and let all unite in the singing of patriotic songs and in the salute to the flag.

JOHN F. RIGGS,  
*Superintendent of Public Instruction.*

Feb. 1, 1904.

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## OFFICIAL CIRCULARS.

Note.—In accordance with section 2735, the county superintendent is expected to send a copy of this circular to each secretary to be read to the board at its meeting on the third Monday in March. It is important that the separate circular to the secretary be mailed at once, and it is suggested that both circulars be mailed under the same cover.

### TO BOARDS OF DIRECTORS.

School directors perform a most important public service, and without pecuniary reward. Their duties, which are many, cannot be well performed without some sacrifice of time and much thoughtful attention to the educational interests intrusted to their care. The fact that you have consented to hold the honored position of school director implies your willingness to perform the reasonable duties your office imposes upon you.

It may not be amiss to call your attention at this time to certain minimum standards that should be maintained in all schools. The children in one district are entitled to as good school privileges as are provided for the children in other districts. There should be practical uniformity throughout the state (1) in the length of the school year, (2) in the intelligent supervision of all school buildings, and (3) in the care and judgment exercised in the selection of teachers.

1. **The Length of the School Year.** In this state the prevailing school year is nine months, usually divided into three terms—fall, winter and spring, the terms not necessarily of equal length. The fact that the average time the schools of Iowa were in session last year was eight months, indicates that many schools were in session an unreasonably short period. I beg to urge upon your attention the advisability of making your school year nine months if possible, or at least eight months.

In districts having but few children of school age it will often be advisable for the board, with the consent of the county superintendent, to temporarily close the school and transport the children to an adjoining district.

II. **Supervision of School Buildings.** The school board should provide for the employment of a competent person to put the school

grounds and outbuildings in proper condition, and to thoroughly clean the floors, walls and desks of the schoolroom a few days before the opening of each term of school, and should pay for this service from the contingent fund. The director should then personally inspect the schoolroom and outbuildings that he may satisfy himself that they are in good condition. Superintendents report that very many outbuildings connected with the schools throughout the State are filthy and repulsive. The interests of life, health and decency require that greater attention be given to this important part of school supervision.

**III. Employment of Teachers.** The most important and at the same time the most difficult duty directors have to perform is the employment of teachers. This duty should, as a rule, be performed by the full board. The board should, where practicable, employ teachers for the full school year, beginning with the fall term. While the contract should be made for the full year, it is advisable for boards, in the case of untried and inexperienced teachers, to reserve the right to terminate the contract at the close of the first term if the teacher's service has not proved satisfactory to the board.

I earnestly recommend that you determine the salary you will pay for the year and make it a matter of record. It is quite customary to pay \$5 or \$10 per month more to a teacher holding a two years' certificate than to one holding a low grade certificate. This policy is heartily recommended. A fixed purpose on your part to pay liberal salaries will attract many applicants and make it possible for you to select capable, tactful teachers.

**Library.** Your attention is called to the provisions of the library law. This law is mandatory. Your school treasurer is required to withhold for the purchase of library books 5 cents for each person of school age in your school corporation, and a larger amount (up to the limit of 15 cents) if directed by the board.

School boards have very generally complied fully with the provisions of this law. Your attention is now called to the necessity of installing book cases or other means for the protection of the books where such provision has not been made.

**Arbor Day.** Friday, April 29th, will be observed throughout the state as Arbor Day. All public school teachers of the state will be furnished with the Arbor Day manual, now in preparation, and you are asked to lend your assistance in making the celebration a notable one in your schools. In this connection your attention is called to section 2787 of the School Laws. If the provisions of this statute are not already met in your district April 29th will be an excellent time to give it effect.

**Conclusion.** It is our wish to co-operate with you fully in the great work of advancing the educational interests of Iowa and it is our hope that the schools under your supervision will steadily advance in efficiency.

JOHN F. RIGGS,

February 20, 1904.

Superintendent of Public Instruction.

**March Meeting of Boards.** The boards of all school corporations hold their first regular meeting on the third Monday in March. No action of the new board would have any force if taken before that date. The place of meeting must be within the civil township in which the corporation is situated. Members elect may qualify on or before the third Monday in March. In case of failure to elect, or to qualify, the incumbent may continue in office. If he fails to qualify there is a vacancy to be filled by the board; and the person appointed holds only until the next annual meeting of the electors. A director may administer the oath to any director-elect and to the president; or such person may qualify before some one authorized by law to take an acknowledgment. Every duty imposed upon the board as a body, in order to have legal standing, must be performed at a regular or special meeting, and be made a matter of record.

At this meeting boards are empowered:

1. To admit members-elect, and to fill the membership of the board. See sections 2757, 2758 and 2771.

2. To elect by ballot from the board a president, who must take the oath of office required by section 5, article 11, constitution of Iowa. Section 2757.

3. To require the secretary to file with the officers named in section 2766, a certificate of the election, qualification and post office address of the president, secretary and treasurer.

4. To transfer any surplus in the schoolhouse fund unappropriated, to either the contingent or teachers' fund, if instructed by the electors to do so. Sections 2749 and 2778.

5. To provide for the teaching of any special study ordered by the electors to be taught as a branch. Sections 2749 and 2778.

6. To take the proper steps to carry out the express wishes of the electors upon matters within the control of such electors. Sections 2778 and 2779.

7. To make any contracts, purchases, payments, and sales necessary to carry out a vote of the electors. Section 2778.

8. To confer with the county superintendent as to the most approved plan for the erection of any schoolhouse. Section 2779.

9. To fix schoolhouse sites and to order the removal of any schoolhouse. Section 2773.

10. To establish graded or union schools wherever they may be desirable. Section 2776.

11. To prescribe a course of study and the branches to be taught. Section 2772. This must include the subjects directed to be taught in all schools by section 2775.

12. To adopt such rules and regulations as may be needed for the general government of the schools. Section 2772.

13. To provide for change of text-books, if so voted by the electors. Section 2829.

14. To use contingent fund in the treasury to purchase records, dictionaries, library books, maps, and apparatus, to the extent of \$25 yearly for each schoolroom. Section 2783.

15. To furnish the necessary books to indigent pupils. Section 2783. If free text-books have been voted, the board will take measures to carry out such vote.

16. To give especial attention to the matter of convenient water-closets, as required by the mandatory provisions of section 2784.

17. Where county uniformity is not in force, to purchase text-books to be resold to pupils, in accordance with sections 2824 to 2828.

18. To direct shade trees set out on each site where the required number is not now in growing condition. Section 2787.

19. To effect an insurance on school property with unappropriated contingent fund. Section 2783.

20. To examine the books and accounts of the treasurer, and make a proper settlement with him. Sections 2780 and 2769.

21. To make such rules and regulations as may be thought necessary to govern and control the board as a body. Section 2772.

22. In school townships, to adopt rules and regulations for the government of each director in the discharge of his official duties. Sections 2772 and 2785.

23. To determine the number of schools, the time more than six months they shall be taught, and where each child shall attend school. Section 2773.

24. To elect teachers and to fix the compensation of each teacher. Section 2778.

25. To estimate the amounts required for the teachers' and contingent funds, and for text-books, and cause the secretary to certify the same with the amount voted by the electors for schoolhouse purposes, to the board of supervisors. Sections 2753, 2806 and 2825.

26. In school townships, to apportion the schoolhouse taxes among the subdistricts, and cause the secretary to certify such appointment in strict accordance with section 2806.

27. To direct upon what terms non-residents not entitled by section 2803 to attend, may be admitted. Section 2804.

28. To arrange for the instruction of children in other districts and to provide for transporting children to school. Section 2774.

29. To provide for the visitation of the schools of the district by one or more of the members of the board. Section 2782.

30. In independent school districts, to make provision for a kindergarten for the instruction of small children. Section 2777.

31. To vote a rate of schoolhouse tax to pay interest on bonds, or to pay the principal maturing, if the electors have failed so to vote. Section 2813.

32. To provide for the enforcement of the provisions of the law for compulsory education. Chapter 128, Acts of the Twenty-Ninth General Assembly.

33. To take any other action consistent with the law that will tend to increase the value and efficiency of the schools.

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#### TO THE SECRETARY:

Your particular attention is called to the provisions of section 2746 and section 2749 of the School Laws of Iowa, edition of 1902.

The supreme court has held in a decision rendered October 27, 1902, in the case of *Goerdts vs. Trumm*, that the powers delegated under section 2749 can be exercised only when notice has been given as provided by section 2746, and that such notice must be specific in the statement of the propositions to be submitted.

Under this decision of the supreme court it will be necessary for your board to direct you to include in your notice of the annual meeting to be held on the second Monday in March specific statement of such propositions as they may desire, or may be required to have submitted to the voters.

It has been held by this department heretofore that the "powers" enumerated under section 2749 could be exercised by the voters when legally assembled even though the ten days' notice had not been given (see note 2, section 2746). But this late ruling of the supreme court not only makes such notice necessary, but requires that the particular propositions to be considered must be clearly set forth in your notice.

JOHN F. RIGGS,  
*Superintendent Public Instruction.*

February 20, 1904.

COUNTY SUPERINTENDENTS CONVENTIONS,  
SPRING OF 1904.

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To THE COUNTY SUPERINTENDENT:

In accordance with Section 2622 of the Code which provides that the Superintendent of Public Instruction may meet the county superintendents at such points in the State as may be most suitable, you are hereby called to meet in convention as follows:

*Muscatine, March 31 and April 1.*

*Sioux City, April 14 and 15.*

*Waterloo, April 19 and 20.*

*Council Bluffs, April 26 and 27.*

*Des Moines, April 28 and 29.*

Meetings will begin at one o'clock p. m. on the first date given.

Section 2742 guarantees to you the expenses incurred in attendance upon one of these meetings. It is expected that you will be present and take an active part, unless for some good reason you are prevented from attending.

JOHN F. RIGGS,  
*Superintendent Public Instruction.*

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SUGGESTIVE SUBJECTS FOR DISCUSSION.

1. Recent school legislation.
2. The National Educational Association at St. Louis, June 28 to July 1.
3. How may better salaries for teachers be secured?
4. How may the institutes be made of greater value to the teachers?
5. Should examination for teachers' certificates immediately follow the institute?
6. What shall be done with the incompetent teachers?
7. Means of securing high school advantages for country youth.

8. How may the department of public instruction render better service to the cause of common school education?
9. The Iowa state teachers' reading circle.
10. How may school sites be beautified and school property improved?
11. Should agriculture be taught in the district schools?
12. What should be the standard for first grade, second grade and third grade certificates?
13. Is consolidation of schools practical in any part of your county?

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### CONCERNING ARBOR DAY.

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April 29th as Arbor Day should be a red letter day in our schools. On this day in particular the minds of the children should be turned to the contemplation of nature in her many forms. It is recommended that the day be celebrated in speech and song, and in the planting of trees and in the beautifying of school grounds. Every school site should be made a place of beauty. In every school district there are people of taste and refinement. Let these organize themselves into a school Improvement Society and, with the children as auxiliary members, plan and execute improvements on April 29th that will add to the permanent beauty and attractiveness of the school premises. Where such a society is organized its work should not end with the day, but through the summer vacation the school grounds should be cared for so that all who look upon them will see a place of beauty and not a wilderness of weeds.

School grounds should be laid off with design,—with flower beds, with grassy plots and with play-grounds and screened out-buildings for boys and girls. The school in external appearance would then become one of the most beautiful spots in the district. in which every child and every citizen would take pride; and this

attractive appearance should, so far as possible, be maintained throughout the year.

It is my earnest hope that Arbor Day will be a glad, joyful day for the children of Iowa.

JOHN F. RIGGS,

*Superintendent of Public Instruction.*

March 16, 1904.

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### RULING CONCERNING INSTITUTES.

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#### TO THE COUNTY SUPERINTENDENT:

An official opinion from this department has been asked by a number of county superintendents on the following question: "Can expenses incurred by a county superintendent in conducting a professional teachers' institute in addition to the regular normal institute be paid from the institute fund?"

Section 2626 says: "He (superintendent of public instruction) shall appoint, upon the request of the county superintendents, the time and place for holding teachers' institutes, such institutes to be called when it is probable that not less than twenty teacher will be present, and remain in session not less than six working days, of which time and place of meeting he shall give notice to the county superintendent of the proper county."

It is the evident intent of the law that the six working days required as a minimum shall be consecutive days. There is, however, nothing in the law to prevent a county superintendent's holding one or more subsequent sessions of the normal institute during the same year, provided application is made in due form (all sessions to be designated in the same application) and approved by the superintendent of public instruction.

No money can be paid from the institute fund for services rendered in connection with the normal institute, whether the initial or a subsequent session, that has not been regularly appointed by the superintendent of public instruction.

JOHN F. RIGGS,

*Superintendent of Public Instruction.*

April 25, 1904.

## CIRCULAR CONCERNING SCHOOL ENUMERATION.

*Note to the County Superintendent:*

You will please forward a copy of this circular to the secretary of each independent district in your county, and a copy to each subdirector in school townships.

## THE SCHOOL ENUMERATION.

## TO DIRECTORS AND SECRETARIES:

It is of the greatest importance that the School census be accurate and complete. Accuracy in statistics is essential *always*, and particularly so in this case, since the interest on the permanent school fund to the amount of over \$200,000 per year is distributed among the several districts of the state in proportion to the school enumeration. The omission of a name that belongs on your list will, therefore, lead to a direct financial loss to your district.

The official reports made to this office for the past five years show a surprising variation from year to year in the number of persons in the state between the ages of five and twenty-one years, and give rise to the suspicion that errors may have been made in the taking of the census. Indeed, it is very evident that either the persons taking the School census or those taking the Federal census are in serious error, since the Federal census taken in 1900 shows the number of persons in the state that year, between the ages of five and twenty-one years to be 767,870, while the returns from school officers show the number to be 731,154.

The School census, as reported to this office for the past five years, is as follows:

In 1899 persons between five and twenty-one.....	727,775
In 1900 persons between five and twenty-one.....	731,154
In 1901 persons between five and twenty-one.....	735,159
In 1902 persons between five and twenty-one .....	728,810
In 1903 persons between five and twenty-one.....	721,486

The law requires that the School census shall be taken between the first and tenth days of September, in each year.

Every person in the district who on the tenth day of September has reached the fifth and not passed the twenty-first birthday is to be counted. To be complete your list must include all persons of the stipulated age, even if married or temporarily absent to attend school or engage in work. A child in one of the charitable or reformatory institutions must be enumerated in the district where his parents reside.

Your attention is called to the School Laws, Edition of 1902 as follows: Section 2785 and notes 15 to 18, page 61; Section 9 of Chapter 128, page 108, and to Form Number 34, page 135.

JOHN F. RIGGS,

*Superintendent Public Instruction.*

August 12, 1904.

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## CIRCULARS.

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### TO BOARDS OF DIRECTORS:

**Note to County Superintendents:** In accordance with section 2735, you will please send to the secretary of every school corporation in your county a copy of this circular to be read at the regular meeting of the board of directors on the third Monday in September.

### REPORTS OF SCHOOL OFFICERS.

Boards of directors when convened on the third Monday in September may exercise a large range of powers as named in certain sections of the school law to which reference is made herein. Your attention is called to the fact that some of these powers are mandatory, chief of which is the settlement with the school treasurer, which settlement must be made in strict compliance with the law.

Full and complete reports must be made at the annual meeting in September by both the treasurer and the secretary. These reports must be verified and they should then be approved by the board. Immediately after the reports are approved, an exact copy of each should be made by the proper officer, and the copy mailed at once to the county superintendent.

### COMPULSORY SCHOOL ATTENDENCE.

An important change in the compulsory attendance law was made by the Thirtieth General Assembly. The law now requires that all children in Iowa who have reached the seventh and not passed the fourteenth birthday are required to attend school (public or private) for sixteen (16) consecutive weeks. Attendance must begin as soon after the first of September as the school may open, but the board of directors may postpone the date of entry for any child to a date not later than the first Monday in December.

The duty of school directors in enforcing this law, and the penalties to which they are liable in failing or refusing to enforce the same, are set forth in section 6, page 108 of the School Laws of 1902.

### THE LIBRARY LAW.

Attention is again called to the provisions of the Library Law which the courts have held to be mandatory.

In the case of N. Willett, County Attorney, v. Rural Independent District No. 5, Military Township, Winneshiek County, O. T. Lommen, Treasurer, a decision was handed down by the district judge in the Winneshiek county May term of court, 1904, to the effect that the school treasurer must, annually, withhold five cents from the semi-annual apportionment for each person of school age in the corporation, the same to be invested by the board in library books.

A new and enlarged library list has just been issued, as required by law, and will be in the hands of your county superintendent not later than October 1st.

### TEACHERS' WAGES AND TENURE.

The common practice of paying a varying wage through the year, that is, paying less per month during the fall and spring than during the winter, is not to be commended.

It is the general practice in town and city districts to employ teachers for the entire school year, beginning with the fall and ending with the spring term, and to pay the same salary for each of the nine months. A number of the school townships in Iowa have recently adopted this plan and we commend it to the favor of others. Tried and competent teachers should be given a contract for the entire year—not for a term at a time, and wages should be paid commensurate with the services rendered. Reports indicate that, within the past year, many boards have advanced the wages of their teachers, but this has been by no means general. The eighteenth report just issued by the commissioner of the labor bureau of the United States shows that the average cost of living in this country has increased 15.5 per cent since 1896. It may be interesting for you to compare the wages you now pay

your teachers with the wages paid eight and ten years ago. The advance in wages should at least keep pace with the increase in the cost of living.

With the earnest hope that the year upon which your schools are entering may witness the best possible progress for the children of Iowa.

Very truly yours,

JOHN F. RIGGS,  
Superintendent Public Instruction.

August 15, 1904.

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**September Meeting.** The boards of all school districts are required by law to hold a regular meeting on the third Monday in September. Among the items of business that may be transacted are the following:

1. To fill, by ballot, any vacancies among the officers or members of the board. Section 2771.
2. To examine the books and accounts of the treasurer, and make a proper settlement with him. Section 2769.
3. To elect a secretary, and also a treasurer, in all districts in which he is not chosen by the electors. Section 2757.
4. To fix the compensation of secretary and treasurer. Section 2780. And to fix the amount of their bonds. Section 2760.
5. To fix schoolhouse sites, and to order the removal of any schoolhouse. Section 2773.
6. To establish graded and higher schools wherever they may be necessary. Section 2776.
7. To prescribe a course of study in the branches to be taught. Section 2772.
8. To adopt such rules and regulations as may be necessary for its own government, as a board, and that of the directors, officers, teachers and pupils. Section 2772.
9. To determine the number of schools, and the time more than six months that they shall be taught during the year. Section 2773.
10. To direct upon what terms nonresidents, not entitled by section 2773 to attend free of tuition, may be admitted. Section 2804.
11. To effect an insurance on school property with contingent fund not otherwise appropriated. Section 2783.
12. To adopt rules and regulations for the government of the director in each subdistrict in school townships, in the proper discharge of his official duties. Section 2785.
13. To make any contracts, purchases, payments and sales necessary to carry out a vote of the electors. Sections 2749 and 2778.

14. To use any unappropriated contingent fund in the treasury to purchase dictionaries, library books, maps, charts and apparatus. Section 2783.

15. To arrange for building and maintaining fences about school-house grounds. Chapter 88, laws of Twenty-seventh General Assembly. See page 99, School Laws of 1902.

16. To issue "funding bonds" to pay any judgment, or any bonds lawfully issued against the corporation. Section 2812.

17. To give special attention to the matter of convenient water-closets, as required by the mandatory provisions of the law. Section 2784.

18. To instruct the treasurer how much more than five cents for each pupil enumerated shall be withheld for library purposes. Chapter 110, Acts of the Twenty-eighth General Assembly. Page 103, Laws of 1902.

19. To instruct the secretary to file with the county superintendent, county auditor and county treasurer the name and postoffice address of the president, secretary and treasurer of the district, promptly according to the law. Section 2766.

20. To take any other action consistent with the law that will tend to increase the value and efficiency of the schools.

#### TO COUNTY SUPERINTENDENTS:

Your attention is called to two questions:

#### I. CONCERNING THE PURCHASE OF LIBRARY BOOKS.

The text of the library law will be found on pages three and four of the new library catalogue.

Your particular attention is called to the fact that, under this act, boards must purchase from the list of books recommended by the state board of educational examiners and of the editions specified. It is not required that the purchase be made of any particular firm. It will not, however, be a compliance with the law to buy a book of any person or firm paying a stipulated price with the understanding that another book shall be given gratis, *unless both books* are found on the new catalogue list and of the edition there named.

The duty of the school board is first to buy books to an amount aggregating at least five cents for each person of school age in the school corporation, selecting the titles and editions from the catalogue prepared by the state board of examiners. Should it then be desired to purchase additional books under section 2783 of the code, such purchase may be without any restrictions as to the list from which the selections may be made.

The library catalogue is to be sent to school officers in the form in which you receive it. It is not permissible to paste in or attach to the catalogue other lists of books, since such additions would be understood by many to be made with the authority of the board of educational examiners and this would lead to serious errors and much confusion. If you wish to forward to school officers other lists of books in addition to the list prepared by the state board of educational examiners, we would suggest that you send same under separate cover.

## II. CONCERNING SEPARATE REGISTER FOR NON-RESIDENT PUPILS.

We wish you to call the attention of your teachers and school secretaries to the fact that, where non-resident pupils are enrolled, a separate register shall be kept for such pupils, and shall be certified to the secretary as required by section 2789 of the School Laws.

The blanks for the secretary's annual report will hereafter call for a report of the number of non-resident pupils enrolled; also for a report of the number of pupils who have, since the last annual report, been enrolled in some other public school of the state.

In many cases, within the course of the school year, pupils are enrolled in two or more districts. Since each secretary reports the total number of different pupils enrolled in his district it is evident that many pupils are counted twice and that the aggregate enrollment, as shown in the Biennial Report, is too great. We shall attempt next year to correct this error, and we wish you to inform your secretaries that such report will be required.

It is also suggested that you instruct your teachers to make to the secretary a separate report of the names of non-resident pupils with the attendance of each; also to state definitely the total number of pupils who previously during the school year have been in attendance on some other public school of the state.

Very truly yours,

JOHN F. RIGGS,

*Superintendent Public Instruction.*

October 17, 1904.

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### TO BOARDS OF DIRECTORS.

Under the law, new directors assume their duties on the third Monday in March, at which time the board organizes for the year by the election of a president. But the annual reports of the officers of the board are not due till the September following, thus giving us the anomaly of the school year for certain purposes closing on the third Monday in March, and for other purposes closing on the third Monday in September. This arrangement is unfortunate since school boards, particularly in school townships are encouraged to make the *term* and not the *year* the unit for school work, the selection of teachers is most cases occurring twice or three times a year.

It will, in my judgment, be a distinct gain to the schools of Iowa when *all* school boards shall come to consider the school year as *beginning* after the long summer vacation, and *closing* just before the next succeeding summer vacation, the year broken at the Christmas time and in March by short vacations, but with the unity of the work disturbed as little as possible.

The contracts of several thousand rural teachers have expired or are about to expire, and in such cases school boards will be called upon to elect their successors for the spring term. I can not urge too strongly that all teachers who have proven themselves competent and successful be elected for the spring term as their own successors, and that beginning with the fall term 1905, all teachers of known efficiency be chosen with the distinct

agreement that they are to hold their positions for the entire year, and not for one or two terms only.

The need of this recommendation will be apparent when it is remembered that last year only 34 per cent of the one-room country schools of the State had the same teacher through the entire year. A more permanent tenure for teachers and good salaries for good teachers is one of the crying needs of our schools.

In this connection it is pertinent to mention that fewer teachers are required than now find employment in the schools of the State. Last year very nearly one-third of our rural schools had an average daily attendance of ten or less. Many of these schools could be temporarily closed under section 2774 of the School Laws. This would mean (1) fewer teachers; hence, the possibility of employing the better and eliminating the poorer ones; (2) better school advantages for the children, and (3) a financial saving to the districts.

That the above suggestions may stand out with greater emphasis, I refrain from the discussion in this circular of less urgent duties that will claim your attention.

Very truly yours,

JOHN F. RIGGS,

*Superintendent Public Instruction.*

Des Moines, Iowa, February 14, 1905.

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## MARCH MEETING.

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### REFERENCES TO THE LAW.

**Date.** The first annual meeting of the board of all school corporations shall be held on the third Monday in March. Section 2757. It is mandatory that the board meet on this date.

**Organization.** The organization may be effected by electing a president. Section 2757.

**President a Member.** The president shall be a member of the board. Section 2757.

**President May Vote.** The president has the same right to vote that any member has. Section 2757.

**Directors Qualify.** Each person shall upon assuming his duties as director qualify as such. Section 2758. So also, the member chosen as president shall qualify as such. (Constitution, article 11, section 5.)

**Who May Administer.** A director may administer the oath to a director-elect. Section 2758. For other officers who may administer the oath, see section 393 of the code.

**Secretary May Not Administer.** The secretary is not authorized to administer the oath to a director-elect or to a president-elect. (101 Iowa, 382.)

**When May Directors Qualify.** A director-elect has until the close of the third Monday in March in which to qualify. Section 2758. One who holds over has ten days from the third Monday in March. (Code, section 1275.) One appointed to fill a vacancy on the board has ten days from the date of appointment in which to qualify. (Code, section 1275.)

**Hold Over.** If a director-elect fails to qualify by the close of the third Monday in March, if he is not his own successor, his predecessor may hold over by qualifying anew. (Code, section 1265.)

**Vacancies—How Created.** 1. By death. 2. By resignation. 3. By failure of director-elect, who was chosen to succeed himself, to qualify by the close of the third Monday in March. 4. By failure of one who might hold over to qualify within ten days from the third Monday in March. 5. By failure of one appointed to fill a vacancy to qualify within ten days from such appointment.

**Vacancies—How Filled.** Vacancies shall be filled by the board, until the next annual meeting of the electors. Section 2758.

**Vacancies Not Anticipated.** The board may not anticipate a vacancy. Appointments may not be made until the vacancy occurs. Section 2758.

**By Ballot.** All officers of the board and all persons appointed to fill vacancies shall be chosen by ballot. Sections 2757 and 2771.

**Quorum.** A majority of the board constitutes a quorum and may transact business. Section 2771. A minority may not transact business, but may arrange for an adjourned meeting of the board. Section 2771.

**No Quorum at March Meeting.** In case there is not a quorum at the regular March meeting, the minority present should effect a temporary organization by choosing a temporary president (Section 2772) and should fix a date and place for an adjourned meeting, at which time a permanent organization may be effected. Section 2771.

**School taxes—By Whom Estimated.** The board shall estimate the amounts needed for the teachers' fund and contingent fund. Section

2806. The amount for schoolhouse fund is voted by the electors at the annual meeting (Section 2749) or at a special meeting. Section 2750.

**Limit of Taxation.** For teachers' fund, fifteen dollars for each person of school age. Section 2806. For contingent fund, five dollars for each person of school age. Section 2806. However, each school corporation may estimate seventy-five dollars. Section 2806. Also, five dollars for each person of school age may be levied for transportation. Section 2806.

**How Estimated.** The amounts needed shall be estimated and certified, except in corporations containing territory in two or more counties, the estimate may be made in mills. Section 2806.

**When Estimated.** School taxes must be estimated at the regular March meeting or at a special meeting, called for that purpose, not later than the third Monday in May. Section 2806.

**Taxes Certified.** All taxes voted by the electors or estimated by the board shall be certified to the board of supervisors by the secretary within five days from the date the board makes its estimate. Section 2667.

**Election of Teachers.** The board shall elect all teachers. Section 2778. But the board may authorize a sub-director to select a teacher for his school. Section 2778. This, however, is a temporary delegation of authority and may be exercised but once by the sub-director.

**Closing Small Schools.** The board may determine the number of schools that shall be in session. Section 2773. They may determine the particular school each child shall attend. Section 2773. With consent of the county superintendent, small schools may be closed. Section 2774.

**Transportation.** The board may provide for transportation to a school in the same or another corporation. Sections 2774 and 2806.

**Miscellaneous.** The board may take any action authorized by law or clearly implied that will increase the efficiency of the schools.

#### TO THE SECRETARY:

As the time for the annual meeting of the electors of the school corporation draws near, we wish to call your attention to the statutory provisions concerning this meeting and urge you to do all in your power to so notify the electors that all propositions which the board, or the electors by petition, desire presented, may legally come before the meeting.

JOHN F. RIGGS,

February 14, 1905.

Superintendent Public Instruction.

**Notice Mandatory.** It is mandatory upon the secretary to post notices for this meeting in at least five public places at least ten days before the second Monday in March. Sections 2746 and 2763. For corporations

of five thousand or more inhabitants a notice shall be posted in each precinct and published in a newspaper. Section 2755.

**Date.** The date of the meeting is the second Monday in March. NO OTHER DAY WILL DO. The meeting can not adjourn to another date. Section 2746 and Note 1.

**Hour of Beginning.** In school corporations of five thousand or more inhabitants the polls shall open at 9:00 a. m. Section 2756. In all other corporations the polls shall open at 1:00 p. m. Section 2754.

**Length of Meeting.** In school corporations having five thousand or more inhabitants the polls shall remain open from 9:00 a. m. to 7:00 p. m. Section 2756. In independent city or town districts not included in above class they shall remain open at least five hours. Section 2754. In rural independent districts and school townships they shall remain open at least two hours. Section 2754.

**Organization of Meeting.** The president and secretary of the board, with one of the directors shall act as judges of election. In the absence of any of these officers, the electors present shall fill the vacancy from their number. Section 2746. For corporations of five thousand or more the board shall select one of its members and two voters of the precinct as judges of election. Section 2756.

**Election of Director.** All independent school corporations elect directors at this meeting. Section 2746. School townships containing an even number of sub-districts elect a director-at-large. Section 2752. The director-at-large shall be chosen by the electors at the annual meeting. (Ruling of Superintendent of Public Instruction.)

**Certificates.** The judges of election shall issue certificates of election to the directors chosen. Section 2746.

**Tie Vote.** A tie vote shall be publicly determined by lot, forthwith before adjournment, under the direction of the judges. Section 2754.

**Who May Be Directors.** A director may be of either sex, and must, at the time of election or appointment, be a citizen and a resident of the corporation and over twenty-one years old, and if a male, he must be a qualified voter of the corporation. Section 2748.

**Who May Vote.** To have the right to vote at the annual meeting, one must have the same qualifications as for voting at the general election and must be at the time a resident of the school corporation. Section 2747.

**Qualifications of Electors.** To be entitled to the right of suffrage, a person must be (1) a male, (2) a citizen of the United States, (3) at least twenty-one years of age, (4) a resident of the State six months next preceding the election, (5) of the county sixty days. (Constitution, article 2, section 1. 69 Iowa, 368, and 75 Iowa, 220. See note 1, section 2747, School laws, 1902.) Foreign born residents must have completed naturalization to be eligible to vote.

**Citizenship.** All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States, and of the State wherein they reside. (Constitution of the United States, Amendment XIV.)

**Registration.** Registration is necessary in corporations of five thousand or more inhabitants. Section 2755 and opinion Attorney-General.

**Women Voting.** Women who otherwise have the qualifications of voters may vote on propositions for the issuing of bonds or for increasing the tax levy. Section 2747.

**Powers of Electors at Annual Meeting.**

1. To direct a change of text-books. Section 2749. But the board makes all adoptions of text-books. Sections 2824 and 2829.

2. To direct the sale or make other disposition of any schoolhouse or site belonging to the corporation, and the application to be made of the proceeds of such sale. Section 2749.

3. To add branches to the course of study. Section 2749. Such action is mandatory on the board. ( 4 Iowa, 564, note 8, section 2749 ) But they may not otherwise change the course of study. Notes 9 and 10 section 2749. The board shall prescribe a course of study. Section 2772.

4. To instruct the board that school buildings may or may not be used for meetings of public interest. Section 2749. In the absence of instructions from the electors, the board shall determine, it being charged with the control and management of the property of the corporation. Section 2745 and 2772.

5. To direct the transfer of any surplus in the schoolhouse fund to the teachers' or contingent fund. Section 2749. The transfer from one fund to another can be made only at the annual meeting; must be from the schoolhouse fund; and must be ordered by the electors.

6. To authorize the board to obtain at the expense of the corporation roads for proper access to its schoolhouses. Section 2749.

7. To vote a schoolhouse tax, not to exceed ten mills on the dollar. Section 2749.

8. To authorize the board to issue school building bonds. Section 2812.

**Limit of Indebtedness.** The school corporation may not become indebted to exceed one and one-fourth per cent of the actual value of the property in the corporation. Section 2, chapter 41, Acts of the Twenty-eighth General Assembly. Under certain conditions a district may become indebted for certain purposes not to exceed two and one-half per cent of the actual value of the taxable property. This can be done only at a special election called for that purpose. Section 1, chapter 114, Acts of the Thirtieth General Assembly. The constitutional limit is five per cent of the "value of the taxable property."

**Tax Levy Not Indebtedness.** The law does not consider taxes levied as outstanding indebtedness. Note 4, Section 2812.

**Notice Necessary.** No proposition may be acted upon by the electors at the regular meeting on the second Monday in March or at a special meeting, except that it be advertised by notices as provided in sections 2746 and 2755. (118 Iowa, 207.)

**Board May Direct.** The board may direct that certain propositions will come before the meeting. Section 2749.

**Electors—Petition.** When petitioned, it is mandatory upon the board to require notice given. Section 2749. When a petition has been properly filed, it is the duty of the secretary to give legal notice.

**Poll Book.** At the annual meeting the secretary shall record in a book provided for that purpose, the names of all persons voting thereat, the number of votes cast for each candidate, and for and against each proposition submitted. Section 2761.

**By Ballot.** All propositions must be voted upon by ballot. Section 2749. Members of the board in all independent districts shall be chosen by ballot. Section 2754. A director-at-large for a school township shall be chosen by ballot. Sections 2851, 2752 and 2823. Constitution, Article 2, Section 6.

**Form of Propositions.** All propositions shall be voted upon in substantially the following form: "Shall a change of text-books be directed?" (or other question as the case may be); and the voter shall designate his choice by writing the word "yes" or "no" in an appropriate place on the ballot. Section 2749.

#### TO THE SUB-DIRECTOR:

As the time for the annual sub-district meeting draws near, we desire to call your attention to the statutory provisions governing this meeting and urge you to do all in your power to so notify the electors that all questions that may come before the meeting may be legally presented.

JOHN F. RIGGS,

February 14, 1905.

Superintendent Public Instruction.

**Sub-District Meeting.** The meeting of the voters of the sub-district shall be held on the first Monday in March. Section 2751.

**Notice.** At least five days' notice shall be given by posting in at least three places in the district. Section 2751. If a special schoolhouse tax is to be voted ten days' notice must be given. Section 2753.

**By Whom Posted.** Notices for the sub-district meeting shall be posted by the director. If there is no director they shall be posted by the secretary of the board. Section 2751.

**Hour of Beginning.** The meeting shall not organize earlier than 9:00 o'clock a. m. Section 2751.

**Closing.** The meeting shall not adjourn earlier than 12:00 m. Section 2751.

**Duration.** The polls shall remain open at least two hours. Section 2754, Section 2823 and Note 2, Section 2751.

**Organization of Meeting.** The meeting shall organize by the election of a chairman and secretary who shall act as judges of election. Section 2751.

**Judges May Vote.** The chairman and secretary of the sub-district meeting may vote the same as other electors. Note 8, Section 2751.

**Judges Not to Qualify.** The chairman and secretary of the sub-district meeting are not required to qualify. Note 7, Section 2751.

**Certificate of Election.** The judges shall declare the result of the election and issue a certificate of election to the person chosen director. Sections 2746 and 2823.

**Tie Vote.** A tie vote shall be publicly determined by lot forthwith, before adjournment, under the direction of the judges. Section 2754.

**By Ballot.** The sub-director shall be chosen by ballot. Section 2751.

**Caucus.** An informal ballot or caucus can be no part of the sub-district meeting. If it is desired to select candidates this must be done before the organization of the meeting. But one lawful ballot may be cast or one vote taken. Note 13, Section 2751.

**Who May Vote.** To have the right to vote at the annual sub-district meeting one must have the same qualifications as for voting at the general election and must be at the time a resident of the sub-district. Section 2744.

**Qualifications of Electors.** To be entitled to the right of suffrage, a person must be (1) a male, (2) a citizen of the United States, (3) at least twenty-one years of age, (4) a resident of the state six months next preceding the election, (5) of the county sixty days. (Constitution, Article 2, Section 1. 69 Iowa, 368, and 75 Iowa, 220. See Note 1, Section 2747, School Laws 1902.) Foreign born residents must have completed naturalization to be eligible to vote.

**Citizenship.** All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States, and of the State wherein they reside. (Constitution of United States, Amendment XIV.)

#### **Powers of Electors at Sub-District Meetings.**

1. To elect a chairman and secretary. Section 2751.
2. To elect a director for the sub-district. Section 2751.
3. To vote additional schoolhouse tax on the sub-district. Section 2753.

**Limit of Special Tax.** The amount of the special tax voted at the sub-district meeting and the schoolhouse tax voted by the school township shall not exceed fifteen mills on the dollar. Section 2753.

**Special Tax Certified.** The secretary of the sub-district meeting shall immediately certify to the secretary of the school township any special tax voted by the electors of the sub-district. Section 2753.

**Vote of Sub-District is not Notice.** A vote of the electors at a sub-district meeting is not legal notice that such proposition will come before the electors at the school township meeting as contemplated in Sections 2746, 2749 and 2755.

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## COUNTY SUPERINTENDENT'S CONVENTIONS SPRING OF 1905.

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### TO THE COUNTY SUPERINTENDENT:

In accordance with Section 2622 of the Code which provides that the superintendent of public instruction may meet the county superintendents at such points in the state as may be most suitable, you are hereby called to meet in convention as follows:

OSKALOOSA, MARCH 30, 2 P. M., MARCH 31, 1:30 P. M.

SIoux CITY, APRIL 20, 2 P. M., APRIL 21, 1:30 P. M.

DES MOINES, APRIL 25, 2 P. M., APRIL 26, 9:30 A. M.

Section 2742 guarantees to you the expenses incurred in attendance upon one of these meetings. It is expected that you will be present and take an active part, unless for some good reason you are prevented from attending.

JOHN F. RIGGS,  
*Superintendent Public Instruction.*

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### SUGGESTIVE SUBJECTS FOR DISCUSSION.

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1. High Schools as Teachers' Training Schools.
2. School Visitation or Office Supervision, Which?
3. The teaching of:
  - (a) Domestic Science in Rural Schools.
  - (b) Agriculture in Rural Schools.

4. How Interest Teachers in Professional Reading.
5. State Certification of Teachers.
6. School Officers' Meetings.
7. How may the Superintendent Render Greatest Benefit to His Schools.
8. The Library.
9. Reports.
10. Consolidation of Schools.
11. Problems of the Institute.
12. The Pupils' Reading Circle.

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## CONCERNING THE READING CIRCLE.

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### TO THE COUNTY SUPERINTENDENT:

We are sending you a supply of the Teachers' Reading Circle circulars for distribution among your teachers. We ask that you hand a copy to each of your teachers, and we earnestly advise that you call their attention pointedly to this course, and urge the necessity of an advanced course of reading, particularly along professional lines.

We also wish to urge that you keep a permanent record in your office of those teachers who take up the Reading Circle work, and that you give credit upon this record from time to time of the work done and also upon the reverse side of the enrollment slip, which is to be then returned to the teacher. The teachers should know that such a permanent record is to be kept in your office.

Very truly yours,

JOHN F. RIGGS,

Supt. Public Instruction and

Chairman Reading Circle Board.

June 3, 1905.

### CIRCULARS TO SCHOOL OFFICERS.

#### TO THE DIRECTOR OF THE SUB-DISTRICT:

Your attention is called pointedly to the following provisions of law:

"Each director shall, between the first and tenth days of September in each year, prepare a list of the heads of families in his sub-district, the number and sex of all children of school age, and by the fifteenth day of said month report this list to the secretary of the school township, who shall make full report thereof."

It is of great importance that the count be carefully made and that your report of the "number and sex of all children of school age" be absolutely correct.

In making the list of children of school age, you will include every person in the sub-district who, on the first day of September, 1905, has reached the fifth and not passed the twenty-first birthday. To be complete your list must include all persons of the stipulated ages, even if married or temporarily absent to attend school or engage in work. A child in one of the charitable or reformatory institutions must be enumerated in the district where his parents reside.

When your report is completed it should be filed at once with the secretary of the school township that he may have time in which to complete his report before the annual meeting of the board on the third Monday of September. The filing of this report with the secretary cannot be delayed under the law beyond the fifteenth day of September.

Respectfully,

JOHN F. REGGS,

August 14, 1905.

Superintendent Public Instruction.

TO THE SECRETARY:

Your attention is called pointedly to the following:

"He (the secretary) shall, between the first day of September and the third Monday of September of each year enter in the book made for that purpose the name, sex and age of every person between five and twenty-one residing in the corporation, together with the name of the parent or guardian." Section 2764.

In making the list of persons between the ages of five and twenty-one you will include every person in the school corporation who on the first day of September, 1905, has reached the fifth and not passed the twenty-first birthday. To be complete, your list must include all persons of the stipulated ages, even if married or temporarily absent to attend school or engage in work. A child in one of the charitable or reformatory institutions must be enumerated in the district where his parents reside.

In school townships each director is required by law to report to you for his sub-district on or before the 15th day of September. Call the attention of directors to this early, and urge accuracy and promptness in their reports.

Your annual report should be completed and copied into one of the blanks before the board meets on the 18th day of September. As soon as the report is approved by the board, carefully fill out the second blank and send it at once to the county superintendent. You will find on the blanks full and complete directions for making your report.

The purchase of books for school libraries under Chapter 110 of the School Laws must be made "between the third Monday of September and

the first day of December in each year." The provisions of this law are mandatory in school townships and rural independent districts. The purchase of books is to be made "by the president and secretary of the board, with the assistance of the county superintendent of schools."

Respectfully,

JOHN F. RIGGS,

August 14, 1905

Superintendent Public Instruction.

#### TO THE TREASURER:

To avoid delay and errors in the matter of making and filing your annual report, I wish to urge that you strictly observe the following:

1. Your financial report should be completed and copied in one of the blanks before the meeting of the board on the 18th day of September.

2. As soon as the board has settled with you, copy the report on the other blank, comparing item by item, and forward at once to the county superintendent.

3. Overdrafts are not recognized or permitted by the law, section 2768 expressly providing that "whenever an order cannot be paid in full out of the fund upon which it is drawn, partial payment may be made." It further provides that the unpaid portion shall draw interest.

If, however, you have permitted any fund to be overdrawn, you must report the amount of the overdraft under the head: "Received From Other Sources," or "Paid For Other Purposes," as the case may require. If the overdraft is of this year, it must be reported as "Received From Other Sources." If it is an overdraft carried over from last year, it must be reported as "Paid For Other Purposes."

4. Complete directions for preparing your report will be found on the blanks sent you.

5. Section 1, Chapter 110 of the School Laws, provides as follows:

"The treasurer of each school township and each rural independent district in this state shall withhold annually from the money received from the apportionment for the several school districts not less than five nor more than fifteen cents, as may be ordered by the board, for each person of school age residing in each school corporation, as shown by the annual report of the secretary, for the purchase of books, as hereinafter provided."

In the case of State of Iowa by N. Willett, County Attorney, v. O. T. Lommen, Treasurer of Rural Independent District No. 5, Military Township, Winneshiek County, May term of District Court, 1904, and in the case of State of Iowa v. Rural Independent District No. 3, Eden Township, Benton County, December term of District Court, 1904, this law is held to be mandatory.

Respectfully,

JOHN F. RIGGS,

August 14, 1905.

Superintendent Public Instruction.

## TO THE PRESIDENT:

The board of directors must meet on the third Monday of September to receive the annual reports of the secretary and treasurer, and to settle with these officers.

In all school corporations a secretary for the ensuing year must be chosen at this meeting. And in all school corporations, except in independent city or town districts, a treasurer for the ensuing year must be chosen at this meeting. Record of settlement and the amount of funds on hand should be endorsed on the bond of the new treasurer.

THE SECRETARY AND TREASURER SHOULD HAVE THEIR REPORTS READY FOR THE APPROVAL OF THE BOARD AT THE TIME OF THE MEETING.

If for any cause the business cannot be completed, adjournment may be had; but this should in no event extend beyond five days, since the law requires that the secretary file his report with the county superintendent "within five days after the third Monday of September," and this report and that of the treasurer cannot be filed until approved by the board.

Your attention is called to the mandatory provisions of Chapter 110 of the School Laws, which require the treasurer of each school township and rural independent district to withhold five cents for each person of school age in the school corporation, the same to be used between the third Monday of September and the first day of December for the purchase of library books. The board may, at its option, increase this amount not to exceed fifteen cents for each person of school age. The books must be purchased by the secretary and president of the board, with the assistance of county superintendent of schools.

In the case of State of Iowa by N. Willett, County Attorney, v. O. T. Lommen, Treasurer of Rural Independent District No. 5, Military Township, Winneshiek County, May term of the District Court, 1904, and in the case of State of Iowa v. Rural Independent District No. 3, Eden Township, Benton County, December term of District Court, 1904, this law is held to be mandatory.

Respectfully,

JOHN F. RIGGS,

August 14, 1905.

Superintendent Public Instruction.

## OPINION OF ATTORNEY-GENERAL.

## CONCERNING THE COUNTY SCHOOL TAX.

STATE OF IOWA,

Office of Attorney-General.

Sir:—In compliance with your request for an opinion whether the tax levied for the support of schools within the county upon all of the taxable property therein may legally be used by the board of supervisors in the purchase of supplies for county superintendents, I submit the following:

Section 2807 provides:

"The board of supervisors shall at the time of levying taxes for county purposes, levy the taxes necessary to raise the various funds authorized by law and certified to it under this chapter; but if the amount certified for any such fund is in excess of the amount authorized by law, it shall levy only so much thereof as is authorized by law. \* \* \* \* It shall also levy a tax for the support of the schools within the county of not less than one or more than three mills on the dollar on the assessed value of all the taxable property within the county."

Section 2808 provides:

"The county auditor shall, on the first Monday in April and the fourth Monday in September of each year, apportion the school tax together with the interest upon the permanent school fund to which the county is entitled, and all other money in the hands of the county treasurer belonging in common to the schools of the county and not included in any previous apportionment, among the several corporations therein in proportion to the number of persons of school age, as shown by the report of the county superintendent filed with him for the year immediately preceding \* \* \* \*"

Under the provisions of Section 2808 the school tax levied upon all of the taxable property in the county under the provisions of the preceding section must be apportioned, with the interest upon the permanent school fund and all other money set apart for the support of the public schools, and distributed to the school corporations of the county in proportion to the number of persons of school age in each school district.

Section 468 of the Code provides:

"The board of supervisors shall furnish the clerk of the district court, sheriff, recorder, treasurer, auditor, county attorney and county superintendent with offices at the county seat, together with fuel, lights, blanks, books and stationery necessary and proper to enable them to discharge the duties of their respective offices. \* \* \*"

Section 2742 of the Code provides:

"He (the county superintendent) shall receive a salary of twelve hundred and fifty dollars a year and the expenses of necessary office stationery and postage, and those incurred in attendance upon meetings called by the superintendent of public instruction; claims therefor to be made by verified statements filed with the county auditor, who shall draw his warrent upon the county treasurer therefor. \* \* \*"

The board of supervisors of the county is required by section 468 to furnish the county superintendent with fuel, lights, blanks, books, stationery and office supplies necessary to enable him to properly discharge the duties of his office. Such supplies must be furnished in the same manner as they are furnished to other county officers, and paid for from the funds of the county.

Under the provisions of section 2742 the claims of the county superintendent for postage, etc., must be verified, filed with the county auditor and paid for by a warrant drawn by the auditor upon the county treasurer.

The statute nowhere authorizes the appropriation or use of any part of the county school tax for the purpose of purchasing supplies for the county superintendent. The entire amount of such tax must be apportioned to the school corporations of the county, and the board of supervisors should furnish all supplies necessary to enable the county superintendent to discharge the duties of his office and pay for the same from the funds of the county.

Respectfully submitted,

August 3, 1905.

CHAS. W. MULLAN,

HON. JOHN F. RIGGS,

Attorney-General of Iowa.

Superintendent of Public Instruction.

## SELECTIONS.

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*From Special Day Manual  
For 1905.*

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Flag Day.....	February 22
Arbor Day .....	April 28
Memorial Day.....	May 30
Thanksgiving.....	November 30
Christmas.....	December 25

## FLAG DAY, 1905.

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**February 22, Flag Day,**  
**Also**  
**Commemorating the Birthdays**  
**of**  
**George Washington, February 22,**  
**and**  
**Abraham Lincoln, February 12.**

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**The Old Flag is to our institutions what the Cross is to the Christian Religion.—Col. W. P. Hepburn.**

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**The American Flag means all that is good and true and pure and beautiful in a land of freedom.**

### SALUTE TO THE FLAG.

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We give our heads and our hearts to our country.

One country, one language, one flag.

The color-bearer displays the flag on the platform or at the teacher's desk. The children may be drilled by signals, thus using the right hand:

1. Make ready.
2. School rises as one.
3. Right arm extended, hand pointing to the flag.
4. Forehead touched with tips of the fingers, repeating the words, "We give our heads."
5. Hand placed over the heart, repeating, "And our hearts."
6. Hand dropped to the side, repeating, "To our country."
7. Standing erect, repeating, "One country."
8. Still standing, repeating, "One language."
9. Right foot advanced and arm extended, hand pointing to the flag, repeating, with emphasis, "One flag."
10. Arm dropped and seats resumed.

—From Primary Education.

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### O'ER THE SCHOOLHOUSE FLOATS THE FLAG.

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Raise the flag on every schoolhouse, let it float upon the breeze;  
Sing our famed "Star Spangled Banner" as it towers among the trees.  
Tell the children all its story on the land and on the sea—  
Tell its pet names, first "Old Glory," then "The Banner of the Free;"  
Tell them how its blood reminds us of the blood of heroes shed—  
That we might dwell in freedom's land, when they were with the dead.

Tell the children that its symbol is a state for every star,  
Tell of its victorious record in the days of strife and war;  
Tell them it is theirs to cherish, that its stars must never set,  
And in future they'll defend it—wheresoe'er a foe is met;  
Keep the flag and school united, North and South and East and West,  
Cheer for loyalty and learning in the land we love the best.

—Adapted from Werner's Magazine.

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### THE STARS AND STRIPES.

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The history of our country is grandly illustrated in our Stars and Stripes. New stars have been added to its field of blue as new states have been admitted into our Union. It had its origin in the era of

Washington, when our republic was established, and it had its greatest trial in the epoch of Lincoln, when the mightiest civil war of the world tested its power and vindicated its supreme control and command over the discordant elements arrayed in deadly and brave attempt to destroy it. Today this flag stands for no one party or section, but floats over the whole country, one and undivided, without sectional hates, united in the bonds of universal liberty and in the sentiments of an inspiring American civilization. It is the proud sign of peace among ourselves and with all the world.—Albert D. Shaw.

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### THE FLAG OF THE FREE.

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The flag floats east, the flag floats west;  
The skies unvell their glory;  
Each stripe reflects the loving light,  
Star tells to star its story.  
From sea to sea, in calm or storm,  
Shine on, O Flag, in beauty  
For all who walk in freedom's ways,  
For all who died for duty.

—George T. Packard.

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### HONOR THE FLAG.

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O blessed land! where Freedom's sun  
Along unclouded course hath run,  
Where Liberty's inspiring song  
Is chorused by a happy throng;  
Thy children are surnamed the brave,  
Their thoughts outrun thy flag to save—  
As rivers leap to ocean wave.

—Addie B. Billington.

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### BANNER OF BEAUTY AND GLORY.

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As I made an extended tour of the states, nothing so impressed and so refreshed me as the universal display of this banner of beauty and glory. It waved over the schoolhouses; it was in the hands of the school children. \* \* Two years ago I saw a sight that has ever been present in my memory. As we were going out of the harbor of Newport, about midnight on a dark night, some of the officers of the torpedo

station had prepared for us a beautiful surprise. The flag at the depot station was unseen in the darkness of the night, when suddenly electric search lights were turned on it, bathing it in a flood of light. All below the flag was hidden, and it seemed to have no touch with earth, but to hang from the battlements of heaven. It was as if heaven was approving the human liberty and human equality typified by that flag.—Benjamin Harrison.

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### WASHINGTON.\*

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(Tune: "Maryland, My Maryland.")

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What is this name we hold so dear?  
 Washington, 'tis Washington.  
 Whom do we honor and revere?  
 Washington, our Washington.  
 Though o'er his head we drop a tear,  
 Yet death for him ne'er held a fear;  
 His name shall brighter grow each year,  
 Washington, great Washington.

\*(Connect this with some marching or flag exercise, and with the picture of Washington.)

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### LINCOLN.\*

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(Tune: Hold the Fort.)

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Now for him who saved our country  
 Let our banners wave,  
 Honor him, the hero lying  
 In his lowly grave.  
 And the children of the nation,  
 May they keep for aye,  
 Just as now we all are keeping  
 Sacred his birthday.

\*(Unite with flag exercise.)

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### SHORT ORATIONS.

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If ever the face of man writing solemn words glowed with holy joy, it must have been the face of Abraham Lincoln as he bent over the Emancipation Proclamation. Here was an act in which his whole soul could rejoice, an act that crowned his life. All the past, the free boy-

hood in the woods, the free youth upon the farm, the free manhood in the honorable citizen's employment—all his freedom gathered and completed in this. And is it any wonder that among the swarthy multitudes, ragged, and tired, and hungry, and ignorant, but free forever from anything but the memorial scars of the fetters and the whips,—is it any wonder there grew up in camps and hovels a superstition which saw in Lincoln the image of one who was more than man, and whom with one voice they loved to call "Father Abraham?"—Phillips Brooks.

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The nation's debt to these men (Washington and Lincoln) is not confined to what it owes them for its material well-being, incalculable though this debt is. Beyond the fact that we are an independent and united people, with half a continent as our heritage, lies the fact that every American is richer by the noble deeds and noble words of Washington and Lincoln. Each of us who reads the Gettysburg speech or the second inaugural address of the greatest American of the nineteenth century, or who studies the long campaigns and lofty statesmanship of that other American who was even greater, cannot but feel within him that lift toward things higher and nobler which can never be bestowed by the enjoyment of mere material prosperity.—Theodore Roosevelt.

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#### WASHINGTON.

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Just honor to Washington can only be rendered by observing his precepts and imitating his example. He has built his own monument.

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#### BE LIKE WASHINGTON.

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We cannot all be Washingtons,  
 And have our birthday celebrated;  
 But we can love the things he loved,  
 And we can hate the things he hated.

He loved the truth, he hated lies,  
 He minded what his mother taught him,  
 And every day he tried to do  
 The simple duties that it brought him.

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#### WHICH GENERAL.

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Sometimes Mamma calls me "general;"  
 I wish I knew which one;  
 But I always try to tell the truth,  
 So I hope it's Washington.

But when I tell my papa that,  
 He laughs loud as he can,  
 And says if she calls me "general,"  
 She must mean Sheridan;  
 Because when Mamma wants me,  
 And I am out at play,  
 I nearly always seem to be—  
 'Bout "twenty miles away."—Kate W. Hamilton.

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## A YOUNG PATRIOT.

I'm just a very little boy,  
 I never fired a gun;  
 I never led an army,  
 Like brave George Washington.  
 And though like him I may not fight  
 To set a people free,  
 I'll try to be as brave and true,  
 As kind and good as he.—Alice Jean Cleator.

---

## LITTLE MARTHA WASHINGTON.

Recitation and Dance for six little girls:

This lady, Martha Washington,<sup>1</sup>  
 Was once a little girl,  
 With dimpled cheeks<sup>2</sup> and blushes  
 And golden hair<sup>3</sup> in curl.  
 She never had a hatchet<sup>4</sup>  
 She never cut a tree,<sup>5</sup>  
 But was full of fun and frolic,<sup>6</sup>  
 Just a little girl like me.<sup>7</sup>  
 Wore a puckered satin petticoat<sup>8</sup>  
 Breast knots, gay and dainty caps,<sup>9</sup>  
 Dropped a courtsey to her mamma,<sup>10</sup>  
 Courtesied deep to Lord Fairfax,<sup>11</sup>  
 Then she grew up like a flower,<sup>12</sup>  
 Pure and sweet and good;<sup>13</sup> and yet  
 Of all things that pleased her fancy  
 She loved best the minuet.<sup>14</sup>

1. Point to picture of Martha Washington.
2. Put hands on cheek.

3. Put hands on hair.
4. Shake head.
5. Swing arms at side.
6. Point to self.
7. Hands sweeping down dress front.
8. Hand on head.
9. Courtesey left.
10. Courtesey right.
11. Standing as tall as possible.
12. Hands folded on chest.
13. Take hold of dress near bottom and drop a deep courtesey. Music 3-4 time begins. Girls separate into three couples, forming a line across platform, a little space between each couple. Partners take hold of hands and hold hands very high.

Beginning with the right foot walk six steps forward (closing left foot up to right, in first position for sixth count). Point toe and lift several inches from floor.

Courtesy front (six counts.)

Turn and walk back (six counts.)

Courtesy to partners.

Each walks past partner (six counts.)

Courtesy front.

Turn and walk back to partner.

Courtesy to partner.

Partners cross hands and walk obliquely left (six counts.)

Courtesy front.

Turn, cross hands and walk back to position.

Courtesy to partners.

Repeat, walking right.

Partners give right hand and turn half round.

Courtesy to partner.

Give left hand back to place.

Courtesy to partner.

Courtesy front.

---

### WASHINGTON AND LINCOLN.

No countries have the heroes  
 So loyal, good and great,  
 As Washington and Lincoln,  
 Whose deeds we celebrate.

We celebrate each year with love  
 Their birthdays far and near;  
 Our flags and banners wave on high,  
 For honored names so dear.

(To be recited by small boys, each carrying a flag which he waves in direction of pictures or busts of Washington and Lincoln.)

### ABRAHAM LINCOLN.

---

'Mid the names that fate has written  
On the deathless scroll of fame,  
We behold the name of Lincoln,  
Shining like a living flame.

When the storm of peril threatened  
His loved land to overwhelm,  
Safe the ship of state he guided,  
With his hand upon the helm.

Statesman, ruler, hero, martyr--  
Fitting names for him, alway;  
Wherefore, let us all, as brothers,  
Love his memory today.

—Susan M. Best.

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### MOTTOES.

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Above all, we must stand shoulder to shoulder for the honor and the greatness of our country.—Theodore Roosevelt.

We are a Republic whereof one man is as good as another before the law. Under such a form of government it is of the greatest importance that all should be possessed of education and intelligence.—Ulysses S. Grant.

Let all the ends thou aim'st at be thy Country's,  
Thy God's and Truth's.

—William Shakespeare.

One flag, one land, one heart, one hand,  
One nation evermore

—Oliver Wendell Holmes.

---

### USES OF THE FOREST.

About sixty per cent of all our railroad ties are made of white oak; nearly twenty per cent are pine. Since every mile of railway needs about twenty-five hundred ties, and there are over two hundred thousand miles of such roads in our country, it takes millions of acres of

timber to supply a single set of ties. Such a set has to be replaced about every seven years. Thus it is that the railways rank among the greatest consumers of wood in the country.

Our telegraph and telephone poles are made largely from hemlock and cedar. The price paid for such timber varies from two to ten dollars per pole.

Flour barrels are made largely from elm. Barrels for liquids from a fine grade of white oak; also ash and elm.

Our furniture is made from walnut, ash, oak, maple, and other hard woods.

White oak and hickory are used in manufacture of wagon and buggy wheels.

Soft woods, as poplar, aspen, spruce, pine and basswood, are used in the manufacture of paper such as is used in newspapers, note books, etc.

Three-fourths of our lumber is made from soft woods, such as white pine, spruce, hemlock and redwood.

The woodwork of machinery is made from hard wood lumber, which constitutes about one-fourth of our lumber output. It comes principally from the wide region east of the Mississippi, between the northern and southern soft wood belts.

The great pineries of Wisconsin, Minnesota and Michigan supply our white pine, the most useful timber in the north temperate zone, because it is in greatest demand for building purposes.

The bark of the hemlock tree is used in the tanning of leather.

Corks are made from the bark of the cork oak, which grows only in Mediterranean countries and Portugal.

As a national industry, forestry stands second only to agriculture in number of people and amount of capital employed and in value of product.

It has been estimated that we have five hundred million acres of growing forest and that thirty-five cubic feet of wood are produced annually per acre.

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#### SUGGESTIVE OUTLINE FOR NATURE STUDY.

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BY ETTA M. BARDWELL.

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#### SUGGESTIONS FOR STUDY OF TREES.

Select some tree near the school building for observation. Study the tree as a whole first.

a. Sketch, noting the following points: Angle which branches make with trunk; comparative length of branches on north and south

sides; ending of main branches, whether abrupt or breaking up into spray-like twigs; comparative height and width of top.

b. Study preparations made by this particular tree for winter: shedding of leaves, withdrawal of material into stems and roots, protection of buds.

c. Sketch twig of not less than two years' growth, noting the following points: shape of bud, position, leaf scar, scale scar, growth of 1903, of 1902. (Drawing is especially valuable in connection with this work, as it leads to more careful observation. A sketch is one way of answering a question.)

d. Have pupils measure growth of three twigs on north side of tree during 1903; three on south side same year. Compare. How account for difference? Where are greater number of buds to be found, on upper or under side of twig? Why? Effect on remaining buds when some are broken off. Why are shade trees pruned? When a limb has been broken off, how does nature attempt to heal the wound? Examine stubs of broken-off limbs and learn how the healing is accomplished. Would the remains of the limb be distinguishable if the tree were cut open? Split a branched twig an inch in diameter and decide what causes a knot in lumber. Differences in shape of knots.

e. Study longitudinal section of piece of stove-wood and identify hard-wood and sap-wood. Call attention to the so-called "annual rings." Why are they of varying thickness in different years? Why not of uniform thickness on all sides of tree? Examine pine lumber and articles made from pine (connect this with the study of lumber industry in geography work).

f. Bring in twigs of trees and keep in water. Watch unfolding of the buds. What becomes of the winter scales?

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#### TREES IN SPRING.

Note trees that flower before the leaves appear. Color of the flowers? What part of the flower of the box-elder forms the seed? Do insects visit flowers of trees?

Which trees "leaf out" first? Which are in full leaf first?

## BIRD STUDY.

One object to be attained by this study is the awakening of an interest in bird life which will lead eventually to the better protection of our birds. Discourage all bird or egg collection.

Endeavor to awaken in the children a genuine interest in what the bird is doing. May and June are the nest-building months for most of our birds. If each child could watch the progress of the building of a single nest, his future interest in bird life would be assured. Bring in some last year's nests and study their formation. Of what are they made? How are the outside materials fastened together? How lined? Purpose of the lining? Have children collect materials for the making of nests and let them try fashioning a nest, lining it with the same materials that the bird used. In doing this a close examination of some nests will be necessary. While constructing the nest, direct children's attention to how the bird must carry his materials. Whether he carries more than one straw or stick at a time and the number of times he must journey back and forth to gather the materials. Does he stay in his nest at night? When does he sleep? How long it takes the bird to build the nest. The place he selects for it. How he begins it. Look for some suitable place for nest—fork of tree or low bush. How does bird shape nest? Study nest of gold-finch, robin. Compare nest of Baltimore oriole with others, in material used and position on tree. How does the oriole plan to keep eggs from falling out of nest? Where does he get his material? Look for horse hairs—show weaving of hairs in and out. Manner of attachment to limb. How lined?

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BIRD DAY.

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In July, 1896, the United States Department of Agriculture issued a circular suggesting that a "Bird Day," to be devoted to instructing the children in the value of our native birds, and the best means of protecting them, be added to the school calendar.

This circular contains a most valuable letter from J. Sterling Morton, on the establishment of "Bird Day" throughout the country. He says: "The cause of bird protection is one that appeals to the best side of our natures. Let us yield to the appeal. Let us have a Bird Day—a day set apart from all other days in the year to tell the children about the birds. But we must not stop here. We should strive continually to develop and intensify the sentiment of bird protection, not alone for the sake of preserving the birds, but for the development of the finer instincts of the child mind."

Superintendent Babcock of Oil City, Pa., originated "Bird Day," and first celebrated it in his school in 1895.

The discussion of what was at that time a novel idea spread to the West, and in 1896 we find Fort Madison, Iowa, celebrating "Bird Day" in a most enthusiastic manner. Professor Bruner, of Nebraska, urged its recognition by the schools of that state the same year.

Since that time the observance of the day has become quite general throughout our Western states. The movement has the most hearty support of the Audubon societies of the various states, as they realize the need of just such work as is accomplished by "Bird Day" work.

The preservation of the birds is not merely a matter of sentiment, or of education in kindness to all living things. It has a utilitarian side of vast extent. The birds are necessary to us. Only by their means can the insects which injure, and if not checked, destroy vegetation, be kept in bounds.

What is most needed is knowledge of the birds themselves, their modes of life, their curious ways, and their relation to the scheme of things. To know a bird is to love him.

Send your boy to the woods to study the patience, the ingenuity, and the industry of birds. Let him learn to distinguish the song of one kind from that of another. Arouse his curiosity as to their habits and give him that innocent delight that the study of nature is sure to bring into his life. Teach him that it

is cowardly to torture helpless birds. Take away the air-gun and insist that the coming generation shall realize the sin of cruelty to God's helpless ones.

Teach your child to love the fields and the woods, the flowers and the birds and you have added to his capacity for happiness a thousandfold.

#### IOWA STATUTES FOR PROTECTION OF BIRDS.

Section 2561. No person shall destroy the nests or eggs of, or catch, take, kill, or have in possession or under control for any purpose whatever, except specimens for use of taxidermists, at any time, any whip-poor-will, night hawk, bluebird, finch thrush, linnet, lark, wren, martin, swallow, bobolink, robin, turtle dove, catbird, sandpiper, snowbird, black-bird, or any other harmless bird, except blue jay and English sparrow; but nothing herein shall be construed to prevent the removal of nests from buildings, and the keeping of songbirds in cages as domestic pets.

Any person violating any of the provisions of this section shall be fined not less than \$1 nor more than \$25 and costs of prosecution, and may be committed to county jail until such fine and costs be paid.

---

#### WHY.

---

Said the boy to the bird,  
 "Now, do pray stop,  
 And tell me at once  
 Why you go with a hop.

Why do you not walk like the goose and the hen,  
 And not hop on two feet, like a robin and wren?"

Said the bird to the boy,  
 "That is easily told,  
 In a very few words,  
 If I may make bold,

And tell you the secret why some birds can walk,  
 And maybe at some time, how some birds can talk.  
 Every bird that can wade in the water can walk,  
 Every bird that can scratch in the dirt can walk,  
 Every bird that has claws to catch prey can walk,  
 One foot at a time, like the hen and the hawk.

But most little birds who can sing a song  
 Are so small their legs are not very strong,  
 To wade with, or scratch with, or catch things; that's why  
 They hop with both feet. Little boy, good-by."

—From New Era First Reader, Eaton & Co., Publishers.

## MEMORIAL DAY.

Time only enhances the lasting value and demonstrates anew the true significance of these inspiring observances.

Whatever may be the character of its temporary problems, this liberty-loving nation is not and never can be forgetful of the immortal heroes of the Civil War.

The debt of gratitude which we owe to the Nation's defenders can never be repaid, either by this or future generations; yet the acknowledged gift of the obligation each year, in various forms and in a multitude of places throughout this broad land purifies our ideas and brings us all together in sympathy of sentiment and unity of purpose.

Generations come and go the issues for which they fought and died soon pass into history. But the principles of undertaking, worthily accomplished for an unselfish purpose, abide forever and guide us to a nobler destiny and still greater achievements as a nation.

WILLIAM MCKINLEY.

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THE FIRST MEMORIAL DAY PROCLAMATION.

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(Extract from the G. A. R. Commander in Chief's Order, May 5, 1868.)

We should guard their graves with sacred vigilance. All that the consecrated wealth and taste of the nation can add to their adornment and security is but a fitting tribute to the memory of her slain defenders.

Let no wanton foot tread rudely on such hallowed grounds; let pleasant paths invite the coming and going of revered visitors and fond mourners; let no vandalism of avarice or neglect, no ravages of time, testify to the present or to the coming generations, that we have forgotten as a people the cost of a free and undivided republic.

If other eyes grow dull and other hands slack and other hearts cold in the solemn trust, ours shall keep it well as long as the light and warmth of life remain to us.

Let us, then, gather round their sacred remains and garland the passionless mounds above them with the choicest flowers of springtime; let us raise above them the dear old flag they saved from dishonor; let us in this solemn presence renew our pledges to aid and assist those whom they have left among us as a sacred charge upon a nation's gratitude—the soldier's and sailor's widow and orphan.

—JOHN A. LOGAN.

#### THE FLAG GOES BY.

Hats off!

Along the street there comes  
A blare of bugles, a ruffle of drums,  
A flash of color beneath the sky.

Hats off!

The flag is passing by.  
Blue and crimson and white it shines  
Over the steel-tipped ordered lines.

Hats off!

The colors before us fly  
But more than the flag is passing by.

Hats off!

Along the street there comes  
A blare of bugles, a ruffle of drums,  
And loyal hearts are beating high.

Hats off!

The flag is passing by.

H. H. Bennett in *Teachers' World*.

---

#### AN ANTHEM FOR ARBOR DAY.

(Tune—"America.")

Joy for the sturdy trees!  
Fanned by each fragrant breeze,  
Lovely they stand!  
The song-birds o'er them trill,  
They shade each tinkling rill,  
They crowd each swelling hill,  
Lowly or grand.

Plant them by stream and way,  
Plant where the children play,  
And toilers rest,  
In every verdant vale,  
On every sunny swale,  
Whether to grow or fail—  
God knoweth best.

Select the strong, the fair,  
Plant them with earnest care—  
No toll is vain.  
Plant in a fitter place,  
Where, like a lovely face,  
Let in some sweeter grace,  
Change may prove gain.

God will His blessings send—  
And all things on Him depend.  
His loving care  
Clings to each leaf and flower  
Like ivy to its tower.  
His presence and His power  
Are everywhere.

—Samuel F. Smith in Wisconsin Annual.

---

#### FOR MEMORIAL DAY.

#### THE BATTLE FLAG.

---

Battered and torn with a hundred shots,  
The flag came home.  
Brilliant and spotless it went to the fray,  
Borne at the front of the ranks that day  
When, proud and eager, they marched away;  
Some rest in their graves in alien plots—  
But the flag came home!

Hear it aloft for the world to see,  
The honored flag.  
It is dearer today than when, fair and new,  
It waved in the sun—red, white and blue;  
It is riddled with bullets through and through,  
But, oh it was in at the victory,  
Though a tattered rag.

Place it away where its fellows stand,  
'Neath lofty dome.

It has served its mission and won its fame,  
And helped to honor unity's name,  
And with cheers and music and glad acclaim  
The people hailed it on every hand,  
When the flag came home.

—Lillian Grey.

---

## CHRISTMAS.

---

*This happy day, whose risen sun  
Shall set not through eternity,  
This holy day when Christ, the Lord,  
Took on Him our humanity,  
For little children everywhere  
A joyous season still we make;  
We bring our precious gifts to them,  
Even for the dear child Jesus' sake.*

—Phoebe Cary.

---

## CHRISTMAS PRAYER.

---

God bless us every one, this day, with the blessing of Jesus.  
By remembering our kinship with all men,  
By well-wishing, friendly speaking and kindly doing  
God help us every one to spread abroad the blessing of Jesus:  
In whose name we keep Christmas:  
And in whose words we Thy children pray together:  
Our father which art in Heaven, hallowed by thy name

—Adapted from Henry Van Dyke.

---

## ON CHRISTMAS NIGHT.

---

The stars that shine on Christmas night  
Beyond all other stars are bright.  
And all night long with solemn voice  
They cry again: Rejoice! Rejoice!  
And lo, our love turns deep and wide  
Toward all mankind at Christmastide.  
Rejoice, rejoice this Christmas morn  
For in our hearts the Christ is born.

—Elizabeth Carter.

THE STAR IN THE EAST.

---

O, a new star, a new star  
Blazed like a lamp of gold,  
For closely pressed to Mary's breast  
The Savior Jesus lay at rest,  
As prophets had foretold.

O, the night wind, the night wind  
A new song found to sing,  
Caught from the gleaming angel choir,  
With harps of light and tongues of fire,  
To praise the new-born King.

O, the worship, the worship  
And myrrh and incense sweet,  
Which shepherd kings from far away  
Had brought with golden gifts to lay  
At the Savior Jesus' feet.

O, the shadow, the shadow  
Of the cross upon the hill,  
But yet the babe, who was to bear  
The whole world's weight of sin and care,  
On Mary's heart lay still.

Virginia Elvoren Harrison.

---

THE FIRST CHRISTMAS EVE.

It was midnight on the hilltop, and the fire was dim and low,  
While the weary shepherds slumbered round the embers' dying glow,  
When a light shone round about them, brighter far than light of day,  
And they saw an angel standing in its pure and living ray,  
He was dressed in white apparel and his face was gravely sweet,  
And he spake unto them gently as they bowed them at his feet.  
"Fear ye not," for they were troubled; "news of peace and joy I bring;  
For tonight in David's city Christ is born, your Lord and King."  
As he spoke, adown the heavens, borne as on the ocean's swell,  
Angel forms came floating nearer, angel voices rose and fell;  
"Unto God the highest glory. Peace on earth. To men good will,"  
Pealed the anthem, that triumphant echoes down the ages still.  
As the angel vision vanished and the song grew faint and far,  
Clear and radiant in the heavens steadfast shone the guiding star;  
Then they travelled on and onward till they reached the lonely shed  
Where the King of all the nations in a manger laid his head,  
And the night was hushed and holy, while the star shone over them,

And the angel song rang softly, "Christ is born in Bethlehem!"  
Nineteen hundred years have fled since the shepherds heard that song,

Since Judea's hills were brightened by the presence of that throng;  
But adown the distant ages, when the Christmas time draws near,  
And our hearths and homes are brightened with the Christmas warmth  
and cheer—

When our hearts with love grow warmer as the light glows in a gem—  
Softly steals the angel's message, "Christ is born in Bethlehem!"

---

#### CHRISTMAS CAROL.

---

Hail to this happy Christmas morn,  
The day our blessed Lord was born,  
Let every heart its tribute bring,  
To bless this birthday of our King.  
"Peace on earth, to men good will"  
Shall be our daily anthem still,  
Till all the nations of the earth  
Will know our precious Savior's worth.

---

#### CHRISTMAS COMES BUT ONCE A YEAR.

---

What would the world be without Christmas,  
Its joy, its good will and its cheer?  
What would the world be without Christmas,  
Although it comes but once a year?  
What would the world do without Christmas,  
Its gifts and its tokens of love?  
What would the world do without Christmas,  
That makes it like Heaven above?

---

#### EVERYWHERE, CHRISTMAS TONIGHT.

---

Everywhere, everywhere., Christmas tonight!  
Christmas in lands of the fir tree and pine,  
Christmas in lands of the palm tree and vine;  
Christmas where snowpeaks stand solemn and white,  
Christmas where cornfields lie sunny and bright;  
Everywhere, everywhere Christmas tonight!

Then let every heart keep its Christmas within,  
Christ's pity for sorrow, Christ's hatred of sin,  
Christ's care for the weakest, Christ's courage for right,  
Christ's dread of the darkness, Christ's love of the light;

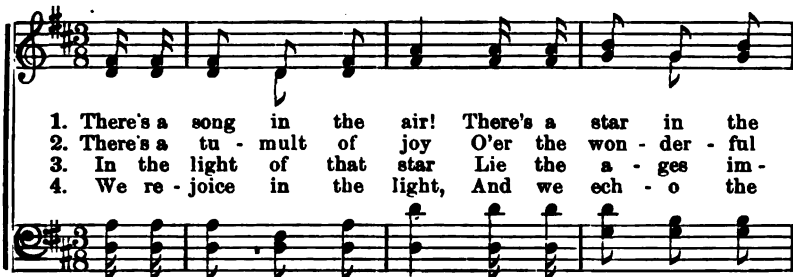
Everywhere, everywhere, Christmas tonight!

—Adapted from Phillips Brooks.

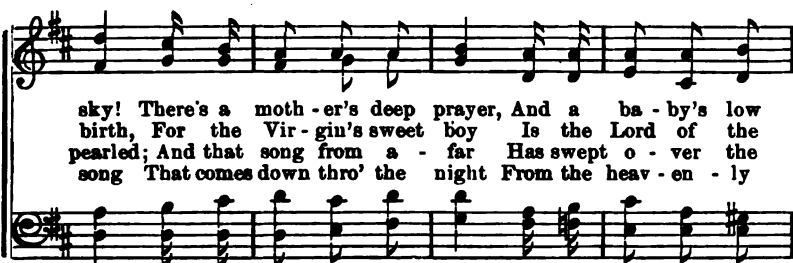
## A CHRISTMAS SONG.

Words by  
J. G. HOLLAND.

Music by  
MARO L. BARTLETT, 1904.



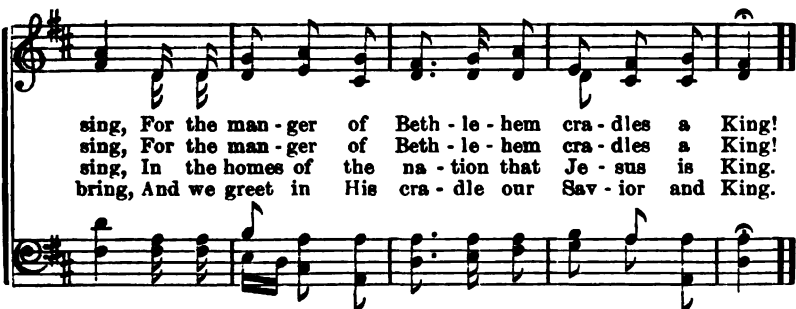
1. There's a song in the air! There's a star in the  
2. There's a tu - mult of joy O'er the won - der - ful  
3. In the light of that star Lie the a - ges im -  
4. We re - joice in the light, And we ech - o the



sky! There's a moth - er's deep prayer, And a ba - by's low  
birth, For the Vir - gin's sweet boy Is the Lord of the  
pearled; And that song from a - far Has swept o - ver the  
song That comes down thro' the night From the heav - en - ly



cry! And the star rains its fire while the beau - ti - ful  
earth. Ay! the star rains its fire while the beau - ti - ful  
world; Ev - 'ry hearth is a - flame, and the beau - ti - ful  
throng; Ay! we shout to the love - ly E - van - gel they



sing, For the man - ger of Beth - le - hem cra - dles a King!  
sing, For the man - ger of Beth - le - hem cra - dles a King!  
sing, In the homes of the na - tion that Je - sus is King.  
bring, And we greet in His cra - dle our Sav - ior and King.

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From The Progressive Music Course, by Moro Loomis Bartlett. By per -  
mission of the W. M. Welch Co., Chicago, Ill.

REPORT OF THE  
A CHRISTMAS SERMON.

---

Bare of head and bare of feet  
Christ and Poverty walked the street.

Past the curse and the muck and the grime,  
Past the door and the haunt of crime.

Past the glare and the flaunt of sin,  
And it was a church that he entered in.

The Christmas prayer at the desk was said,  
And the Rich Parishioner bowed his head.

Through the carven oak of the organ loft  
The golden music trembled soft,

And a high-priced tenor, sweet of throat,  
Poured through the arches his mellow note.

In the velvet reach of each cushioned pew  
The pampered worshipers dozed, for they knew

The gifts and bequests that could insure  
Their seats in the House of God secure,

"O come all ye faithful!" the Pastor said,  
And the Rich Parishioner bowed his head.

Velvet and furs on either side,  
Sloth and fatness, vanity, pride—

Then where in the Temple of Prayer was a seat  
For the tattered of gown and the bare of feet?

Sat a simple bench by the paneled door,  
"Reserved for the Poor" was the sign it bore,

And the Poor Parishioner huddled there—  
Small place had he in the Temple of Prayer.

Old and feeble and mendicant,  
Yet humble withal and suppliant.

And the son of man as he entered, eyed  
The throng that knelt to the prayer of pride.

Then he turned to the suppliant shabby and hoar  
And sat in the paupers' bench by the door.

"O come all ye faithful!" the Pastor said,  
And Christ and Poverty bowed the head.

—Wallace Irwin.

### CHRISTMAS SYMBOLS.

---

It is said that the entrance of Santa Claus by the chimney rose from the story of Hertha, a goddess of Norse mythology. When her festival was celebrated an altar of stones was erected. Fir branches were piled upon it and set on fire. Through the dense smoke made by the green wood, the goddess was supposed to descend and grant the petitions of her worshippers.

The mistletoe typifies the Trinity—the number three. Its white berries are often found in groups of three and they ripen at the sacred season.

Holly symbolizes the Crown of Thorns, the prickly leaves standing for the thorns, the scarlet berries for the drops of blood.

“Santa Claus is only a simple form and parable of the love which is at the heart of things, which has blessed us all our days.—Emerson.

---

### SANTA CLAUS.

---

He comes in the night! He comes in the night!  
He softly, silently comes;  
While the little brown heads on the pillows so white  
Are dreaming of bugles and drums.

The little red stockings he silently fills,  
Till the stockings will hold no more.  
The bright little sleds for the great snow hills  
Are quickly set down on the floor.

Old Santa Claus doeth all that he can;  
This beautiful mission is his;  
Then, children, be good to the little old man,  
When you find who the little man is.

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### PICTURE OF SANTA CLAUS.\*

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“He was dressed all in fur, from his head to his foot,  
And his clothes were all tarnished with ashes and soot.  
A bundle of toys was flung on his back,  
And he looked like a peddler just opening his pack;  
His eyes, how they twinkled! his dimples, how merry;  
His cheeks were like roses, his nose like a cherry;  
His droll little mouth was drawn up like a bow,  
And the beard on his chin was as white as the snow;  
The stump of a pipe he held tight in his teeth,  
And the smoke it encircled his head like a wreath.

He was chubby and plump, a right jolly old elf,  
And I laughed when I saw him in spite of myself.  
A wink of his eye, and a twist of his head,  
Soon gave me to know I had nothing to dread.  
He spoke not a word but went straight to his work,  
And filled all his stockings, then turned with a jerk,  
And laying his finger aside of his nose,  
And giving a nod up the chimney he rose.  
He sprang to his sleigh, to his team gave a whistle,  
And away they all flew like the down of a thistle;  
But I heard him exclaim, ere he drove out of sight,  
'Happy Christmas to all, and to all a good-night.'"

\*Talk with the pupils about the names that are given to the imaginary being who distributes Christmas cheer, Santa Claus, St. Nicholas, Kriss Kringle; also ask them to describe Christmas customs in different countries.

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#### CHRISTMAS SENTIMENT.

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Granted that the spirit of Christmas is only sentiment, what then? What is the strength of patriotism which has such a hold of a man's heart that he springs to his feet at the sound of the national anthem and the tears come into his eyes when he gets the first glimpse of his native country after long years abroad. What is the flag itself? Only a yard of cloth, but men's hearts would break if it were disgraced, and for its honor the bravest men have laid down their lives. Perhaps there is not such a man as Santa Claus, perhaps he does not come down the chimney and stand in the children's room when Christmas day is born, with his long silver beard and his load of gifts. Perhaps he does not go from bed to bed and give the children his blessing. But Santa Claus is truer than we think, for he is only a simple form and parable of the love which is at the heart of things which has blessed us all our days.

Once upon a time a mother was sitting with her children at the table, and it was a poor home, where there was not much to eat, and nothing over for a stranger. As the mother was dividing their portions to the children, and sorrowing in her heart that there was so little to give, a child came to the door, cold and hungry, and begged for bread and shelter. Her kind heart could not refuse the appeal on the child's face, and every one at the table gave a little to the guest. And then the family closed their eyes and bowed their heads to thank God for his mercy, when a voice, tender and beautiful beyond all words, blessed the mother and her children. They opened their eyes and looked, and behold the stranger had departed. Then they knew that the Christ child had come to them as he cometh at Christmas tide to every one who is of a simple and kindly heart.—Ian Maclaren.

## TWO VIEWS OF CHRISTMAS.

Nephew—A merry Christmas, uncle! God save you!

Scrooge—Bah! humbug!

Nephew—Christmas a humbug, uncle! You don't mean that, I am sure.

Scrooge—I do. Out upon "Merry Christmas!" If I had my will, every idiot who goes about with "Merry Christmas" on his lips should be boiled with his own pudding, and buried with a stake of holly through his heart. He should!

Nephew—Uncle!

Scrooge—Nephew, keep Christmas time in your own way, and let me keep it in mine.

Nephew—Keep it? But you don't keep it!

Scrooge—Let me leave it alone, then! Much good may it do you! Much good it has ever done you.

Nephew—I am sure I have always thought of Christmas as a good time—a kind, forgiving, charitable, pleasant time; and therefore, uncle, though it has never put a scrap of gold or silver in my pocket, I believe it has done me good, and will do me good; and I say, God bless it!—Charles Dickens.

## THE CHRISTMAS SHEAF.

"Now, good-wife, bring your precious hoard,"

The Norland farmer cried;

"And heap the hearth, and heap the board,

For the blessed Christmas-tide.

"And bid the children fetch," he said,

"The last ripe sheaf of wheat,

And set it on the roof o'erhead,

That the birds may come and eat.

"And this we do for His dear sake,

The Master kind and good,

Who, of the loaves he blest and brake,

Fed all the multitude."

Then Fredrica, and Franz, and Paul,

When they heard their father's words,

Put up the sheaf, and one and all

Seemed merry as the birds.

Till suddenly the maiden cried,

The boys were hushed in fear,

"Dear father, should we give the wheat

To all the birds of the air?"

"For if tomorrow from our store  
We drive them not away,  
The good little birds will get no more  
Than the evil birds of prey."

"Nay, nay, my child," he gravely said,  
"You have spoken to your shame,  
For the good, good Father overhead,  
Feeds all the birds the same."

"He hears the ravens when they cry,  
He keeps the fowls of the air;  
And a single sparrow cannot lie  
On the ground without his care."

—Phoebe Cary.

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### CHRISTMAS AT NUTCRACKER LODGE.

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Mr. and Mrs. Nutcracker were as respectable a pair of squirrels as ever wore grey bushes over their backs and Nutcracker Lodge was a hole in a tree. They had a son named Featherhead, who was a squirrel of some smartness, but he was sulky and contrary, and he always found matter of complaint in everything his father and mother did.

Nobody understood him, he said, he had higher aspirations than could be bounded by that rotten hole in a hollow tree. He could not and would not come down to the contemptible toil of laying up a few hickory-nuts for winter. "Depend upon it, my dear," said Mrs. Nutcracker, "that fellow must be a genius."

"Fiddlesticks on his genius," said old Mr. Nutcracker, "what does he do? He eats enough for any two, and he never helps gather nuts."

The Chipmunks, a branch of the Nutcracker family, were a lively, sociable race, and on the very best of terms with the Nutcracker Grays. Young Tip Chipmunk, the oldest son, was so very active in providing for the family, that old Mr. and Mrs. Chipmunk had very little care, but could sit at the door of their hole and chat with the neighbors, quite sure that Tip would have plenty laid up for winter.

Now, Featherhead looked down upon Tip Chipmunk and said "I hope, mother, you won't invite the Chipmunks at Christmas, these family dinners are such a bore. There are our cousins the high-fliers, if we could get them there would be some sense in it."

When Mrs. Nutcracker repeated this to old Nutcracker he said: "I wish good, industrious sons like Tip Chipmunk were common. For my part I find these uncommon people the most tiresome. They are not content with letting us carry the whole load, but they sit on it, and scold at us while we carry them."

But Mr. Nutcracker found that Christmas dinners were apt to go as his wife said; and his wife was apt to go as young Featherhead said; and so the Chipmunks were left out, for the first time for many years. The Chipmunks, however, took all pleasantly and accepted Mrs. Nutcracker's apologies, and young Tip looked in on Christmas morning with the compliments of the season, and a few beech-nuts which he had secured as a great dainty. The fact was that Tip's little striped coat was so filled up and overflowing with cheerful good-will to all that he could never understand that any of his relations meant to slight him.

—Adapted for reading, from story by Harriet Beecher Stowe.

#### WHAT LITTLE SAUL GOT, CHRISTMAS.

Us parents mostly thinks our own's  
The smartest children out!

But Widder Shelton's little Saul  
Beats all I know about!  
He's weakly like—in p'int o' health  
But strong in word and deed  
And heart and head, and snap and spunk,  
And allus in the lead!

Comes honest by it, fer his pa—  
Afore he passed away—  
He was a leader—(Lord, I'd like  
To hear him preach today!)  
He led his flock; he led in prayer  
Fer spread o' Peace—and when  
Nothin' but War could spread it he  
Was the first to lead us then!

So little Saul has grit to take  
Things jes' as they occur;  
And Sister Shelton's proud o' him  
And he is proud o' her!  
And when she "got up"—jes' fer him  
And little playmates all—  
A Christmas tree—they ever'one  
Was there but little Saul.

Poor little chap was sick in bed  
Next room; and Doc was there,  
And said the children might file past,  
But go right back to where  
The tree was, in the settin' room.  
And Saul jes' laid and smiled—  
Ner couldn't nod, nor wave his hand,  
It hurt so—Bless the child!

## REPORT OF THE

And so they left him there with Doc—

And warm tears of his Ma's \* \* \*

Then—sudden-like—high over all

Their laughter and applause—

They heerd: "I don't care what you git

On your old Chris-mus tree

Cause I'm got somepin you all haint—

I'm got the pleurisy!"

—James Whitcomb Riley in the Cosmopolitan.

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 SANTA CLAUS.

I used to watch for Santa Claus

With childish faith sublime,

And listen in the snowy night

To hear his sleigh bells chime.

Beside the door on Christmas eve

I put a truss of hay,

To feed the prancing, dancing steeds

That sped him on his way.

I pictured him a jolly man,

With beard of frosty white,

And cheeks so fat that when he laughed

They hid his eyes from sight;

A heart that overflowed with love

For little girls and boys,

And on his back a bulging pack,

Brimful of gorgeous toys.

If children of a larger growth

Could have a Christmas tree

From Father Time, one gift alone

Would be enough for me—

Let others take the gems and gold,

And trifles light and vain

But give me back my old belief

And Santa Claus again!

—Life.

---

 CHRISTMAS IS COMING.

Christmas time is drawing near!

Old Santa Claus will soon be here,

And then, oh, won't we have fun,

Sisters and brothers everyone!

A pretty Christmas tree he'll bring,—

Around its sparkling light we'll sing,—

And on its branches he will place

A toy to gladden each young face.  
And when to say our prayers we kneel  
We'll ask that Santa Claus may feel  
Sorry for little girls and boys  
To whom he's never taken toys.  
That he'll remember not to slight,  
Any little child that Holy Night;  
But if he should forget the poor,  
Then we must think of them the more.

#### FATE OF THE CHRISTMAS DINNER.

The feast was spread. Mamma and cook to other scenes retreated,  
When Tommy ran to take a look before the guests were seated.  
The turkey, brown as brown could be, reposed upon a platter—  
And sure you need not wish to see a Christmas turkey fatter!  
And Tommy waits not for the guests, who still most sadly linger,  
But right into the turkey's breast he pokes his little finger.  
He gouges out with right good-will a handful of the stuffing,  
And fills his little mouth until his cheeks seem strangely puffing.  
A lordly "drumstick" next he spies, and eagerly he eyes it.  
Then swiftly seizing on the prize, with willing teeth he tries it,  
His pinafore, a sorry sight, would drive mamma to madness,  
While nose and mouth and cheeks are quite a-shine with grease and gladness.

But Tommy heeds not minor ills—to jelly now he dashes,  
And on the damask cloth he spills a dozen scarlet splashes,  
The plainer food he passes by, and gives his whole attention  
To tasting each and every pie—their fate I dare not mention.  
The Christmas guests had lingered long—they dillied and they dallied—  
Until at last, a merry throng, around the board they rallied.  
Alas! what havoc meets their gaze! Their hopes how quickly falling!  
As they look on in wild amaze, to view the scene appalling.  
The turkey with his "drumstick" bare, his lordly breast quite battered,  
The pies no longer plump and fair, the cloth with juice bespattered.  
Alas! Alack! How eyes do snap! Poor Tommy's fate seemed certain;  
But grandma takes him on her lap, and so we drop the curtain.

—Helen Whitney Clark.

#### DIALOGUE.\*

School—

Little brown squirrel, pray, what do you eat?  
What had you for dinner today?

Squirrel—

Nuts, beautiful nuts, so nice and so sweet!  
I gather them off the tall trees in the wood,  
And eat all the kernels I find that are good,  
And then throw the hard shells away.

School—

Little brown squirrel, but what do you do  
When the season for nuts is o'er?

Squirrel—

I gather ripe nuts all the long summer through,  
And hide them so deep in a hole in the ground;  
Then, when the dark winter again has come round,  
I have plenty still laid up in store.

\*(The pupil representing the squirrel could be dressed in brown, and might stand under a branch of a tree set upon the stage.)

### SNOW IN TOWN.

Nothing is ever so quiet and clean  
As snow that falls in the night;  
And isn't it jolly to jump from bed  
And find the whole world white?  
It lies outside on the windows,  
It rests on the boughs of the trees,  
While sparrows crowd at the kitchen door,  
With a pitiful, "If you please?"  
And while we are having breakfast  
Papa says, "Isn't it light  
And all because of the thousands of geese  
The Old Woman plucked last night.  
And if you are good," he tells us  
"And attend to your A, B, C,  
You may go in the garden a make a snow man,  
As big or bigger than me!"

### GREETINGS.

If I could be the Old Year,  
That's passing swift away,  
I'd hasten to the children,  
And to them I would say:  
Oh! happy romping children,  
That I have loved so dear,  
I hope you'll not forget me,  
Though I may not be near.  
If I could be the New Year,  
I'd take them by the hand,  
And kiss their smiling faces  
As joyously they stand,  
And bid them all a welcome,  
The fondest that I knew,  
And hope they'd learn to love me,  
And be my good friends, too.

CHRISTMASTIDE.

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December nights are cold and long,  
His days are dark and drear,  
But through them sounds the sweetest song  
That mortals ever hear.  
It is the song the angels sang—  
Few were the listeners then—  
But through the world the echoes rang,  
"Peace and good will to men."  
A glory in the skies afar  
Shines like a heavenly gem—  
It is the radiance of that star  
Which rose at Bethlehem.  
It lights the lagging winter days,  
It crowns the dying year,  
And earth grows brighter in its blaze,  
For Christmas tide is here.  
Sometimes our tumult in the air  
O'erwhelms the music's flow;  
Sometimes our torches' flash and flare  
O'ercomes the heavenly glow;  
But willing heart and listening ear  
May hear that song again,  
For Christmas days at last are here—  
"Peace and good will to men."

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—Ninette M. Lowater.WINTER.

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Winter day! frosty day!  
God a cloak on all doth lay;  
On the earth the snow he sheddeth,  
O'er the lamb a fleece he spreadeth,  
Gives the bird a coat of feather  
To protect him from the weather,  
Gives the children home and food,  
Let us praise Him—God is good!



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**1. Report of the State Educational Board  
of Examiners.**

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**2. Regulations Concerning State Certi-  
ficates and Diplomas.**

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**3. Report of Reading Circle Board.**

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## REPORT OF THE STATE EDUCATIONAL BOARD OF EXAMINERS.

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### DATES OF EXAMINATION FOR STATE DIPLOMAS.

1903

Des Moines.....November 29-30

1904

Des Moines.....November 30-December 1

### DATES OF EXAMINATIONS FOR STATE CERTIFICATES.

1903

Cedar Falls .....November 24-25

Des Moines.....December 29-30

1904

Cedar Falls.....March 8-9

Cedar Falls.....June 2-3

Des Moines.....June 9-11

Mount Vernon.....June 22-24

Council Bluffs.....June 29-July 1

Sioux City.....July 20-22

Shenandoah.....July 20-22

Cedar Falls.....July 21-23

Humboldt.....July 25-27

Woodbine.....July 28-30

Iowa City.....July 28-30

Des Moines.....July 28-30

Independence.....August 2-4

Cedar Falls.....November 22-23

Des Moines.....December 27-29

1905

Cedar Falls.....March 6-8

Cedar Falls.....May 31-June 2

Des Moines.....June 15-17

Council Bluffs.....June 19-21

Cedar Falls.....July 19-21

Mount Vernon.....July 20-22

Shenandoah.....July 20-22

Ft. Dodge.....July 24-26

Iowa City.....July 27-29

Des Moines.....July 27-29

Woodbine.....July 27-29

Sioux City.....July 27-29

Oskaloosa.....August 2-4

Independence.....August 22-24

Decorah.....August 30-September 1

## WORK OF EDUCATIONAL BOARD OF EXAMINERS.

## STATEMENT

Showing record of examinations held by the state educational board of examiners; together with fees received and deposited with the state treasurer.

## STATE DIPLOMAS

		No of Applicants		Certificates Issued		Failures	Fees
		Males	Females	Males	Females		
January 1, 1904 .....			1		1		\$ 5 00
June 1, 1905 .....		1		1			5 00
	Totals.....	1	1	1	1		10 00

## STATE CERTIFICATES

December 1, 1903..	.....	2	9	1	9	1	\$ 31 00
December 1, 1903..	Renewals.....	.....	1	.....	1	.....	3 00
January 1, 1904..	.....	9	12	5	5	11	46 50
January 1, 1904..	Renewals.....	19	27	19	27	.....	138 00
February 1, 1904..	Renewals.....	2	.....	2	3	.....	6 00
April 1, 1904..	.....	6	3	6	3	.....	27 00
April 1, 1904..	Renewals.....	4	2	4	.....	.....	18 00
May 2, 1904..	Renewals.....	6	3	6	3	.....	27 00
July 1, 1904..	.....	26	53	24	46	9	223 50
July 1, 1904..	Renewals.....	12	27	12	27	.....	117 00
August 1, 1904..	.....	48	85	37	63	33	349 50
August 1, 1904..	Renewals.....	14	29	14	29	.....	129 00
September 1, 1904..	.....	.....	13	.....	5	8	27 00
September 1, 1904..	Renewals.....	8	24	8	24	.....	96 00
December 1, 1904..	.....	2	4	2	4	.....	18 00
December 1, 1904..	Renewals.....	7	26	7	26	.....	99 00
January 2, 1905..	.....	19	10	14	8	7	76 50
January 2, 1905..	Renewals.....	6	11	6	11	.....	51 00
February 1, 1905..	Renewals.....	.....	5	.....	5	.....	15 00
April 1, 1905..	.....	5	4	4	4	1	25 50
April 1, 1905..	Renewals.....	2	1	2	1	.....	9 00
July 1, 1905..	.....	21	48	20	46	3	202 50
July 1, 1905..	Renewals.....	14	32	14	32	.....	138 00
August 1, 1905..	.....	1	.....	.....	1	.....	3 00
August 1, 1905..	Renewals.....	1	.....	.....	1	.....	3 00
August 15, 1905..	.....	46	114	36	82	42	417 00
August 15, 1905..	Renewals.....	17	70	17	70	.....	261 00
September 1, 1905..	.....	2	7	.....	1	8	15 00
September 1, 1905..	Renewals.....	12	12	12	12	.....	72 00
	Totals.....	311	632	272	548	123	\$2644 50

## PRIMARY STATE CERTIFICATE

			No. of Applicants		Certificate's Issued		Failures	Fees
			Males	Females	Males	Females		
November	1, 1903	Renewals		1		1		\$ 3 00
December	1, 1903	Renewals		4		4		12 00
January	1, 1904			8		5	3	19 50
January	1, 1904	Renewals		7		7		21 00
April	1, 1904			2		2		6 00
April	1, 1904	Renewals		1		1		3 00
May	2, 1904	Renewals		1		1		3 00
July	1, 1904			32		30	2	93 00
July	1, 1904	Renewals		3		3		9 00
August	1, 1904			57		54	3	166 50
August	1, 1904	Renewals		9		9		27 00
September	1, 1904			3		3		9 00
September	1, 1904	Renewals		19		19		57 00
December	1, 1904			2		2		6 00
December	1, 1904	Renewals		3		3		9 00
January	2, 1905			4		4		12 00
January	2, 1905	Renewals		3		3		9 00
July	1, 1905			42		30	12	108 00
July	1, 1905	Renewals		5		5		15 00
August	1, 1905			4		3	1	10 50
August	1, 1905	Renewals		3		3		9 00
August	15, 1905			46		46		138 00
August	15, 1905	Renewals		34		34		102 00
September	1, 1905			65		43	22	162 00
September	1, 1905	Renewals		8		8		24 00
Totals				367		324	43	\$1033 50

## SPECIAL STATE CERTIFICATES

		No. of Applicants		Certificate's Granted		No. Failed	Kind	Fees Received and Deposited
Males	Females	Males	Females					
July 1, 1904	1		1				Drawing	\$ 3 00
August 15, 1905	3		1	2			Music	6 00
Totals	4		2	2				9 00

# REPORT OF THE TWO YEAR STATE CERTIFICATES

	No. of Applicants		No. Certif's Granted		No. Failed	Fees Received and Deposited
	Males	Females	Males	Females		
July 1, 1904.....	.....	1	.....	1	.....	\$ 2 00
August 1, 1904.....	.....	9	.....	6	3	15 00
August 15, 1905.....	8	17	6	15	4	46 00
September 1, 1905. Renewals .....	1	1	1	1	.....	4 00
September 15, 1905.....	2	5	2	1	4	10 00
Totals.....	11	33	9	24	11	77 00

## SUMMARY

	Number of Applicants.			Certifications and Diplomas granted.			No. Failed	Fees Received and Deposited
	Males	Females	Total	Males	Females	Total		
State Diplomas.....	1	1	2	1	1	2		\$ 10 00
State Certificates.....	311	623	943	272	548	820	123	2 644 50
Primary State Certificates.....	.....	367	367	.....	324	324	43	1 033 50
Special State Certificates.....	.....	4	4	.....	2	2	2	9 00
Two Year State Certificates .....	11	33	44	9	24	33	11	77 00
Totals.....	323	1037	1360	282	809	1181	179	\$3774 00

## DIPLOMAS AND CERTIFICATES ISSUED UNDER THE PRESENT LAW FOR BIENNIAL PERIODS ENDING SEPTEMBER 30, 1905

	1882-1883.	1884-1885	1886-1887.	1888-1889	1890-1891	1892-1893	1894-1895.	1896-1897	1898-1899	1900-1901.	1902-1903.	1904-1905.	Total
State Diplomas...	...	...	38	44	52	38	54	41	42	30	8	2	358
State Certificates	7	9	53	141	238	252	440	509	680	774	652	820	4575
Primary State C.	.....	.....	.....	.....	.....	.....	.....	.....	114	173	186	324	797
Special State C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	5	2	10
Two Year State C	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	33	38
Totals.....	7	9	91	185	290	290	494	550	836	989	856	1181	5778

## STATEMENT

Of examination fees received and deposited with the State Treasurer for the biennial period ending September 30, 1905

Date of Deposit	No. of Treas. Receipt	Amount
January 2, 1904.....	224	\$ 276 50
May 24, 1904.....	240	87 00
September 10, 1904.....	266	1317 50
February 18, 1905.....	305	301 50
September 30, 1905.....	362	1791 50
Total.....		3774 00

## EXAMINATION FEES

Received and deposited with the State Treasurer during biennial periods ending July 1.

1884-85.....	\$ 42 00	
1886-87.....	33 00	
1888-89.....	766 00	
1890-91.....	856 50	
1892-93.....	1140 00	
1894-95.....	1282 00	
1896-97.....	1800 50	
1898-99.....	2456 50	
1900-01.....	3268 00	
1902-03.....	2508 00	
1904-05.....	3161 00	
1905*.....	1791 50	
		\$19,105 00

\*From July 1, 1905 to September 3, 1905.

## PAID FOR EXPENSES

During biennial periods ending July 1.

1882-83.....	\$ 237 05	
1884-85.....	72 55	
1886-87.....	318 12	
1888-89.....	539 50	
1890-91.....	786 92	
1892-93.....	549 81	
1894-95.....	964 95	
1896-97.....	1052 28	
1898-99.....	1660 57	
1900-1901.....	2377 60	
1902-03.....	2193 88	
1904-05.....	2621 61	
*1905.....	367 79	
		\$13,742 73

\*From July 1, 1905 to September 30, 1905.

## SUMMARY.

Number of diplomas issued to September 30, 1903.....	356
Number of diplomas issued during the biennial period ending September 30, 1905.....	2
Total number issued and in force September 30, 1905.....	358
Number of state certificates issued to September 30, 1903.....	3755
Number of state certificates issued during the biennial period ending September 30, 1905.....	820
Total number issued to September 30, 1905.....	4575
Expired by limitation to September 30, 1903.....	1984
Expired by limitation during the biennial period ending September 30, 1905.....	755
Total number expired to September 30, 1905.....	2739
Number state certificates in force September 30, 1905.....	1836
Number of primary state certificates issued to September 30, 1903....	473
Number of primary state certificates issued during the biennial period ending September 30, 1905.....	324
Total number of primary state certificates issued to September 30, 1905.....	797
Expired by limitation to September 30, 1905.....	45
Expired by limitation during biennial period ending September 30, 1905.....	171
Total number expired to September 30, 1905.....	216
Number primary state certificates in force September 30, 1905.....	581
Number special state certificates issued to September 30, 1903.....	8
Number special state certificates issued during the biennial period ending September 30, 1905.....	2
Total number issued and in force September 30, 1905.....	10
Number two-year state certificates issued to September 30, 1903.....	5
Number two-year state certificates issued during biennial period ending September 30, 1905.....	33
Total number issued to September 30, 1905.....	38
Expired by limitation to September 30, 1905.....	5
Total number in force September 30, 1905....	33
Total number state diplomas and state certificates in force September 30, 1905.....	2818

## STATE DIPLOMAS.

Number granted to college graduates .....	1
Number granted to State Normal School graduates.....	1
Total number diplomas issued.....	2

## STATE CERTIFICATES.

Number granted to University graduates.....	67
Number granted to College graduates.....	90
Number granted to State Normal School graduates....	463
Number granted to Private Normal School graduates.....	48
Number granted to High School graduates.....	62
Number granted to Academy graduates.....	9
Number granted to Non-graduates.....	81
Total number certificates issued.....	820

## PRIMARY STATE CERTIFICATES.

Number granted to University graduates.....	4
Number granted to College graduates.....	15
Number granted to State Normal School graduates.....	143
Number granted to Private Normal School graduates.....	68
Number granted to High School graduates.....	58
Number granted to Non-graduates....	36
Total number primary state certificates issued.....	324

## SPECIAL STATE CERTIFICATES.

Number granted State Normal School graduates.....	2
Total number special state certificates issued.....	2

## STATEMENT

Of the expenses of the State Educational Board of Examiners from  
October 1, 1903 to October 1, 1905.

## WARRANTS ISSUED.

From October 1, to December 31, 1903.

1903		
Oct. 14	F. E. Bolton	\$ 3 00
Nov 12	Selina Gooder	5 00
Nov. 12	W. F. Giesseman	35 40
Dec. 5	G. W. Walters	3 00
Dec. 5	C. A. Fullerton	1 50
Dec. 5	A. W. Rich	6 00
Dec. 19	Alice Altona	28 40
Dec. 24	H. H. Seerley	44 03
Dec. 28	O. J. McManus	56 02
Dec. 27	J. F. Brown	60 13
Dec. 29	Geo. E. MacLean	5 85
Dec. 31	J. F. Mitchell	5 55
Dec. 31	Hattie Moore-Mitchell	5 55
Dec. 31	Fannie Schaffer	10 05
Dec. 31	Grace Troutner	10 05
Dec. 31	Alice Altona	9 00
Dec. 31	Emma C. Moulton	7 05
Dec. 31	J. F. Riggs	14 20
Dec. 31	R. C. Barrett	16 32
Total		361.10

From January 1, to December 31, 1904.

Jan. 16	W. F. Giesseman	\$ 7 60
Jan. 18	H. H. Seerley	9 60
Jan. 22	Geo. E. MacLean	12 03
Jan. 30	Alice Altona	70 50
Feb. 6	Addie B. Billington	30 00
Feb. 18	O. J. McManus	29 00
Mar. 1	I. S. Condit	3 00
Mar. 1	G. W. Walters	3 00
Mar. 1	L. W. Parish	3 00
Mar. 1	A. W. Rich	3 00
Mar. 1	C. A. Fullerton	3 00
Mar. 7	Alice Altona	51 00
Mar. 19	H. H. Seerley	14 79
Mar. 19	A. W. Rich	9 00
Mar. 31	Alice Altona	81 00
Apr. 30	Alice Altona	78 00
Apr. 30	Ella Ford-Miller	6 00

May 6.....	H. H. Seerley.....	\$ 10 15
May 6.....	H. H. Seerley.....	14 58
May 6.....	Alice Hopper.....	10 50
May 6.....	Clara A. Tilton.....	3 00
May 12.....	M. F. Arey.....	3 00
May 26.....	Sarah Riggs.....	3 00
May 26.....	W. H. Bender.....	3 00
May 31.....	Alice Altona.....	75 00
June 13.....	Emma C. Moulton.....	5 00
June 13.....	Grace Troutner.....	5 00
June 13.....	Agnes Patterson.....	5 00
June 13.....	F. L. Douglass.....	6 55
June 23.....	Iowa State Normal School.....	7 00
June 23.....	G. W. Walters.....	2 25
June 23.....	M. F. Arey.....	3 00
June 23.....	G. W. Sampson.....	3 00
June 23.....	K. F. Geiser.....	4 50
June 23.....	H. E. Cummins.....	3 00
June 23.....	Enola P. Pierce.....	2 25
June 23.....	Sarah F. Price.....	3 00
June 23.....	E. A. L. Gregg.....	2 25
June 23.....	Allison E. Aitchison.....	2 25
June 23.....	C. P. Colgrove.....	1 50
June 23.....	Anna McGovern.....	1 50
June 23.....	Bertha L. Patt.....	3 00
June 23.....	Henrietta Thornton.....	3 00
June 23.....	Ira S. Condit.....	3 00
June 23.....	G. W. Newton.....	3 00
June 23.....	S. F. Hersey.....	3 00
June 23.....	L. W. Parish.....	3 00
June 23.....	A. W. Rich.....	12 00
June 29.....	Alice Altona.....	93 70
June 30.....	F. L. Douglass.....	4 85
June 30.....	Jennie Culbertson.....	4 95
July 16.....	Jessie McKlveen.....	18 00
July 16.....	Emma C. Moulton.....	15 50
July 30.....	Alice Altona.....	107 90
Aug. 3.....	O. J. McManus.....	44 48
Aug. 3.....	F. C. Ensign.....	6 00
Aug. '16.....	H. C. Dorcas.....	6 00
Aug. 29.....	Emma C. Moulton.....	31 90
Aug. 29.....	Alice Altona.....	97 65
Sep. 28.....	Agnes Patterson.....	25 12
Sep. 28.....	Ida M. Rea.....	24 00
Sep. 28.....	Grace Troutner.....	26 90
Sep. 28.....	Jennie Culbertson.....	20 10
Sep. 30.....	Alice Altona.....	76 50
Sep. 30.....	Anna M. Rea.....	4 50
Oct. 12.....	G. H. Krohn.....	13 60
Oct. 12.....	Will Anderson.....	22 26

ov. 12.....	Addie B. Billington .....	\$ 3 00
Dec. 7.....	W. H. Bender.....	3 00
Dec. 7.....	L. W. Parish.....	3 00
Dec. 7.....	S. F. Hersey.....	2 25
Dec. 7.....	G. W. Walters.....	4 50
Dec. 7.....	H. H. Seerley.....	18 35
Dec. 7.....	G. W. Newton.....	2 25
Dec. 7.....	H. C. Cummins.....	1 50
Dec. 7.....	M. F. Arey.....	1 50
Dec. 7.....	Sara F. Rice.....	3 00
Dec. 7.....	Anna E. McGovern.....	1 50
Dec. 7.....	Ira S. Condit.....	3 00
Dec. 7.....	Bertha Patt.....	1 50
Dec. 7.....	K. F. Geiser.....	1 50
Dec. 7.....	A. W. Rich.....	9 00
Dec. 7.....	C. P. Colgrove.....	3 00
Dec. 7.....	Enola P. Pierce.....	1 50
Dec. 7.....	C. A. Fullerton.....	3 00
Dec. 7.....	G. W. Sampson.....	6 00
Dec. 7.....	H. H. Seerley.....	8 00
Dec. 31.....	Alice Altona.....	30 00
Dec. 31.....	Alice Altona.....	13 50
Dec. 31.....	Joseph S. Hofer.....	9 70
Dec. 31.....	Fannie Schaffer.....	17 60
Dec. 31.....	G. H. Krohn.....	1 50
Total.....		\$1807.46

From January 1, to September 30, 1905.

Jan. 21.....	J. C. Bennett.....	\$ 12 97
Feb. 1.....	H. H. Seerley.....	23 27
Feb. 9.....	Alice Altona.....	49 50
Feb. 13.....	Maria M. Roberts.....	17 13
Feb. 23.....	Ethel McLanahan.....	6 51
Apr. 10.....	O. J. McManus.....	116 28
Apr. 10.....	H. H. Serely.....	10 15
Apr. 22.....	G. H. Krohn.....	1 60
May 24.....	Geo. E. Mac Lean.....	22 73
May 29.....	Viola H. Schell.....	50 00
June 17.....	Elizabeth Culbertson.....	8 30
June 19.....	Minna M. Merriam.....	15 75
June 19.....	Lucy E. Plummer.....	20 63
June 19.....	Iowa State Normal School.....	5 40
June 20.....	Louise E. Hughes.....	33 00
June 21.....	A. T. Downey.....	14 50
June 23.....	Mara M. Roberts.....	5 02
June 30.....	Viola H. Schell.....	75 00
July 6.....	Baker-Trisler Co.....	1 10
July 17.....	G. H. Krohn.....	15 05
July 22.....	John F. Riggs.....	8 71

July 25.....	C. A. Wise & Sons Co.....	\$10 92
July 25.....	Lura C. Kingman.....	12 50
July 25.....	Lucy E. Plummer.....	12 00
July 25.....	H. H. Freer.....	7 25
July 25.....	Geo. H. Betts.....	6 00
July 31.....	Viola H. Schell.....	13 79
July 31.....	Viola H. Schell.....	75 00
July 31.....	Viola H. Schell.....	10 07
Aug. 2.....	J. M. Hussey.....	3 00
Aug. 3.....	A. L. Brown.....	3 00
Aug. 10.....	Elizabeth Dean.....	9 75
Aug. 10.....	D. E. Brainard.....	9 60
Aug. 10.....	Clara S. Dodds.....	6 35
Aug. 11.....	Louise E. Hughes.....	42 90
Aug. 12.....	Mrs. Nellie Sillick.....	18 00
Aug. 14.....	Jos. S. Hofer.....	19 75
Aug. 14.....	Elizabeth Culbertson.....	48 40
Aug. 14.....	A. W. Merrill.....	20 10
Aug. 26.....	Viola H. Schell.....	14 55
Aug. 26.....	Viola H. Schell.....	9 07
Aug. 31.....	Viola H. Schell.....	75 00
Aug. 31.....	Agnes M. Patterson.....	13 28
Sept. 12.....	A. W. Merrill.....	3 35
Sept. 16.....	Elizabeth Culbertson.....	4 80
Sept. 22.....	Will Anderson.....	12 04
Sept. 23.....	Elizabeth Culbertson.....	9 80
Sept. 29.....	Viola H. Schell.....	19 55
Sept. 30.....	Viola H. Schell.....	75 00
Total.....		\$2 884 88

## DIPLOMAS AND CERTIFICATES

## DIPLOMAS

Date	To Whom Issued	Date	To Whom Issued
1904 Jan. 1	Martha F. Roberts	1905 June 1	Walter B. Munson

## STATE CERTIFICATES.

1903 Dec. 1	Ida Culver Jennie F. Hall Ella Hoffman Leonora Jacobson Anna Johnson Ethel Langhead Mary Shilliam O. S. von Krog Retta Walrod Maud C. Weatherwax Viola H. Schell	1904 Jan. 1	Anna B. Osborne F. E. Howard John W. Jackson Frank Jarvis E. C. Meredith Elizabeth Carroll Fred L. Casidy Grace Greenfield Jessie M. Lickel E. E. Martin J. W. Miller Paul J. Scarbro R. W. Sies Sylvia Smith Nellie Stewart Walter S. Athearn Ida B. Berg Lillian Blakely O. E. Dixon Mabel Kitterman P. W. Peterson Katharin G. Willis A. W. Grisell Forest C. Ensign
1904 Jan. 1	Lillian Bridgeford O. B. Chassell Lillian B. Daniels Nellie Dority Ezra Gibson A. L. Heminger Luella Johnson Mary E. Lovejoy O. D. Longstreth Jessie Nutting-Priest Jessie B. Roberts G. W. Satterthwaite Celia G. Troutner Ella B. Chassell Florence Claypool Elizabeth M. Frye Nellie Johnson Mary E. Steele J. G. Grundy C. F. Barrows J. C. Bennett Charles Benson Harriet Bieghler Mary S. Christ Valona Helmick Fannie Holmes Elizabeth D. Jones Henrietta Kelly Frances Lathrop Alice G. Lewis James L. Mishler Mattie O. Phillips	Feb. 1	S. S. Wright P. E. McClenahan
		April 1	Zoe Britton Don Campbell C. E. Cavett George F. Failor Ward Hannah Loula Houck Walter P. Jensen Nellie M. Johnson Guy Ribble F. E. Ball Prudence Jackson Anna Montgomery S. M. Coddington Jos. C. McGee G. U. Gordon

## STATE CERTIFICATES-CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
May	James Lawrey Jesse Benjamin E. W. Fellows J. H. Jacobs Jeannett J. Joy Sarah E. Kendall Maud St. John LuVerne A. Wilson Ozias Lincoln	1904 July	F. H. Stewart J. C. Smith Ella L. Sandager T. B. Stewart Mary A. Sartori Grace L. Smith R. R. Stuart Frances R. Stillwagon Bertha C. Stiles Josephine Ullman Thomas Teakle Daisy E. Turner Alice Vaala Pearl VanTuil Edith VanTuil William Wendt Ernest Walker Minnie Willits Jennie Woodard G. E. Wallace Bessie Gartland Chloris Anderson Gertie Ayers Loretta H. Blake O. L. Brooks Nellie Cahow Dora D. Clark Mae G. Dolan Rose M. Ferguson A. W. Fuller Flora B. Galt A. T. Gifford E. C. Hill Mame E. Hochstetler Edith Korinke John W. McCulloch Mary R. McDuffie G. E. Mueller Olive I. Orton F. A. Poots Mary Ryan Jessie L. Turner Katherine Walters A. O. Wydell Beniah Dimmitt Jennie Hallingby M. R. Hassell Agnes Heightshoe Hilda Lundin Ella Ford-Miller Margaret Montgomery Katharine Newberry Sophia Heiber-Pfeifeer Mabel Shearer F. W. Shultis Fannie B. Small
ly	B. D. Atchley Bessie P. Ballentine Julia Bucklen Florence Butler Bessie C. Brinton Mabel J. Beudel Amy S. Cray Jessie M. Clark A. S. Colgrove Flo Correll Cora A. Downey Olive S. Dickerson Essie M. Davies Raymond Dix Ruth E. Egloff Edna A. Foxwell Ruth O. Fuller Mary M. Faint Chris Fesenbeck Ethel Gerken Ethel Hall Margaret B. Hardy Frank G. Hart Owen Hammersley Harriet E. Joice J. L. Johnson Helga L. Jacobson Ora E. Johnson Carl J. Knack Vida R. Keene Ruth C. Long B. B. McGinnis Mary McComb E. L. McConkie Cora Mercer Fannie Mueller C. S. Misseldine Elizabeth Minney Maud Nelson Carrie Olsen Mabel A. Payton Margaret F. Pearson Maud E. Pattison C. W. Roadman E. A. Roadman Mike M. Ries		

Date	To Whom Issued	Date	To Whom Issued
1904 July	<div>1</div> <div>Emma R. Valenta Clara A Boss Mary Heiber Ole H. Hollen Margaret Taylor J. R VanFossen Life Harrison</div>	1904 Aug.	<div>1</div> <div>J. L. Packer Adda B Patterson Delpha E. Peak Cora Quayle Millie M. Rogers Valeria Secor Cora O. Selby J. H. Seymour R. H. Sylvester Adda B. Stone G. H. Schwenke Verna M Scott Ella F. Williams J. A. Yeager Ida Haloldson Jean E. MacKeller Louise A. Nelson Georgia E Packer Lucy O. Pingrey Lina C. Ankerman Anna B. Coomer F. W. Else Melvin R. Fayram F L. Kolb Marion E. Leonard John Sogard Fannie A. Van Dorn Mamie A. Klinefelter Ida G Ziegler Bertha L. Marsh Francis E. Smith B. J. Read Winnifred Morris Mary Michener Gertrude Clark Parker Constance G. Camp Edna Wells E G. Quigley Susan Kirstetter Ella Lukenbell Katherine Sass A. D. Cromwell Bettie Remstrom Franc Lymer Bertha Westphal L. A. Giddings C. C. Knoll Emily Witter Leo V. Beaulieu Jessie I. Graham Jessie P. Hastings Lida Marshall Hope Chester E. Moffett Edmund L. Kelley Anna M. Sorenson Grace N. Swan</div>
1904 Aug.	<div>1</div> <div>E. R. Jackson Charlotte Dryden Palmoe Arent E. L. Ackerman Minnie B. Ashton Nellie M. Bay E. F. Bean Rose Bixler Clara E. Bonnewell Laura Baker Margaret Butterfield C. E. Burton Mattie A. Connolly Martha E. Cooper Elmer Charlson H. L. Eells Mae S. Ensign Agnes M. Farnsworth Mary M. Feltus Jessie M. Ford Madeline Feyereisen A. S. Gist Velma Gray W. I. Griffith Alice Haley Tura Hawk T. B. Homan Elizabeth Henderson G. C. Hoyt Lillian M. Johnson Ida F. Judd Orie A. Johnson Lura Chase Kingman Anna V. Kegler Grace I. Keteleson Grace Lambert Harry Lambert John Ludwickson Helena Messerschmidt Lillie M. Mohan Harry B. Morgan G. H. Mount J. C. McGlade Chas. D. McClain Amelia McDonnell Blanche McLaughlin Kate H. McDonald Allie Nelson</div>		

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1904 Aug.	1 Abram O. Thomas Roland Neal Daisy Boylan W. O. Chisholm H. L. Cosner Anna Duffield Wm. T. DeMar Eva M. Fleming Katie Griffin Lucy E. Hall Margaret McCormick Ethel Moore Terza Quick Ida P. Richmond Maye Sedgwick Ralph A. Sell Marie L. Schmidt C. C. Smith Caroline S. Toby E. R. Thomas A. C. Voelker J. T. Bradshaw E. R. Collins F. L. Douglass Kittie Grimes Anna M. Hill Liona Hopkins Valeda Madsen J. B. Morris F. N. Olry Fannie D. Patton Kittie C. Preston Antonia J. Stober G. G. Washburn Eva M. White Robert F. Wood	1904 Sept.	1 Mabel S. Young Maria Z. Pingrey Elsie Whited Mollie B. rber Millsap Loren W. Inman Maisy Schriener Maud Hursey W. P. Johnson P. P. Sullivan Chas. H. Young W. J. Cattell Francis Rogers Florence Marshall Clara E. Thompson Lura Phillips Lora L. Richardson Katherine M. Taylor H. O. Bateman Laura A. Hoag L. E. A. Ling J. C. King
1904 Sept.	1 Anna Black Lydia B. Christ Lucy D. Mason Florence Reid Elsie Travis Lillie Ludwig Minnie Bucklew Dora Cornelysen Anna R. Darwin Ida Droege Meyer Kate A. Hummer Minnie H. Hunter Hattie Kline Marshall McFee Emma L. Meier Mary B. Miller Crissie Millsbaugh Carrie E. Robbins Lucy Sullivan	1904 Dec.	1 Lily F. Ashley H. E. Deater Harriet M. Furry Myrta Harlow Mary Lytle Agnes Otto Mame R. Prosser Nellie L. Smith Ella M. Thompson Jessie C. Walker F. A. Welch Rose W. Reed Mamie Burgess Olive Orr Lydia J. Rolston Emelia Seltzer Laura S. Horn Gladys E. Dunn Myrtle Ivey J. W. Jones Ethel A. Lutes J. O. Murphy Jessie G. Stuart Jessie L. Bradshaw Mary Davis Ada Eighmey J. T. Fackler Thyrza Hornewell Anna Kuebler R. T. Scott L. P. Sornson Bertha Taylor Lydia Tostlebe J. F. Treasure

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1904 Dec. 1	Etta J. Rider Mary Brannan J. E. Cameron Lizzie Rhodes Elsie Orcutt	1905 April 1	Agnes J. Field May E. Francis Hulah Coon Harry G. Martin Lucy G. Mowrer R. M. Peterson L. N. Gerber
1905 Jan. 2	W. H. Branch L. P. Breeden E. E. Cavanaugh Mae Comstock Fannie Eberhart Rose Friedman H. J. Henderson M. H. Hoffman H. W. Hurt Bernice Johnston H. E. Jones I. C. Lovejoy F. J. Mantz Ceola Marks F. M. Phillips Emma H. Sheets Mary L. Sutton H. O. Swingen H. M. Tiffany B. F. Wescoat J. H. Wescoat P. L. Sager C. Jay Boyington Mrs. J. L. Buechele Emma A. Dilley H. A. Dwelle Jay A. Lapham E. C. Lynn Mary Morton Jeannette Sloss F. O. Smith Nellie Syverson Mary E. Waller May Williams Jennie E. Wolcott Myra Dungan Kittie M. Howard Katherine Paine F. W. Perkins	1905 July 1	Eva M. Baker Mary A. Brown C. E. Buckley Grace Brainard Isabella Cowan L. D. Curtis Edith H. Curtis Lillian Dale George D. Eaton James E. Fitzgerald Maud L. Foot Elsie Farbrick Margaret Gilchrist Martha Hutchinson Albert L. Halstead O. E. Hibbs Elizabeth Hieber Florence Kimball J. H. Kelley Mollie Kelly James Kendrick Lillian E. Long Jennie M. Lindsey Philomena Meyer Alice R. Mallory B. W. McKeen John McPherson Carrie L. Neidy A. T. S. Owen Cora D. Patterson Cora A. Reed Mary Rourke Erdena Rose Mary E. Patterson Leslie I. Reed Elsie Steioman Edna Sune Katharine Sheehan William R. Sandy Leslie D. Troth Cynthia T. Wight Ellen B. Wight Belle Woodford Margaret A. Gorman Emma A. Jackson E. W. B. Mark Veva Aylwood Emma Arent
1905 Feb. 1	Florence Okerson Francis Mills Nellie Young-Foote Celesta Schoener Delia Reilly		
1905 April 1	Macv Campbell Sarah Carpenter J. T. Colgrove Frank E. Ford		

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1905 July 1	John Butler Louis Boling Lewis Currrell Myra Downs Marie A. Dege John Donahue Flora E. Evans Rose Freeman Susa M. French Mary Flynn Emma Freyermuth Jennie Gustafson Sephorus Gates Ida M. Hoebel Clara P. Hayden Alta Hiddleston Jessie L. Hopkirk Harry G. Hayes Georgia B. Herrald Katie B. Hoyt Lucy Ingersoll Austin G. Johnson Thomas E. Jones Leah F. Johnson Fanny G. Kaye Lucy L. Kinsley Gladys L. Kiefer Carrie A. Knipe Raymond Leland Lizzie M. Lamberty Lottie A. Lindberg Maye L. Loomis Jessie M. Lester Iva M. Leary Jessie B. Little Emery E. Magee Walter W. Miller Alvena Mann W. L. Maulsby Iva P. McCaffree D. B. McIlravy Aulora McIntire R. E. Newcomb Blanche L. Nel on Elizabeth New on Harry A. Ogden Willia A. Outilie Clarence M. Parker Mabel Paull J. C. Ralph Lydia I. S'err Katharine Spangler Edna L. Thatcher Cordelia Treat Edna A. Walker Ethel H. Wood	1905 July 1	George W. Weber Effie M. Weisbard Mary Walters Ellen White Dalma E. Young William S. Yeager Daisy P. Blum Lillian McCollm
		1905 Aug. 1	Nellie M. Cole C. R. Lowe
		1905 Aug. 15	Naomi Achenbach Bessie Burnett Willis Bell Vlasta Brühl Margaret Craven Harry D. Dana Mary B. Donnon. Albert C. Fuller Vinnie Garrett Ellen Gillmor Jennie A. Huie Hanora L. Huddy F. S. Hills Nellie N. Hoxie Mary E. Keehl Emma Larkin R. R. Lewis Maude Lane Ella E. Moore Jennie B. Maynard Mae Mercer Katie J. Putnam Mary B. Richardson Cornelia Rhynsburger Mabel S. Ray W. H. Ray Elizabeth C. Rittgers Irene C. Sacquety Alma Savage Sadie Seabloom Belle Supplee Minnie L. Wilson Sara M. Wilson Sedona Fesenbeck Erie D. Collins Johana Hansen Charles S. Cory Bessie Buchanan Letta D. Horner Anne E. Cunningham Belle C. Aker Edith M. Anderson Elizabeth Baur Cecil W. Bangs

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1905		1905	
Aug. 15	Arthur Bruce Mathilde Becker Ruth Butler A. D. Coffman Bess J. Chase David D. Carlton Harry A. Crawford John M. Dunkerton Matilda A. Duns Laura Finch Grace Farrell Jessie Farlow Mildred I. Goodrich John S. Goldthwaite Theresa A. Gepson Alice Graham Myrtle Goodykoontz Charlotte Hunt Etta K. Hildabrand Winnifred M. Harris Augusta Hitchcock Carrie Hiams Clara E. Johnson Effie Longman Mae Lyon Albert J. Meyer Orin C. Morrison Walter S. Mason Jesse B. Manifold Kate L. Morse Althea Montgomery Bessie McCrea Nora McCaffree Anna C. McKinnon Gertrude Nenko Myrtle Newman Hilma C. O. son Elma Overmire Stella Pence Jessie A. Parish Mabel Parish Lillie Parmenter Lucy S. Royce Leo Ranney Alma L. Reichert Elizabeth Riff Ida L. Soecht Lena Swanson Fay M. Starn Grace N. Smith Minnie Vannest Virginia White Nell White Mabel Wilbur Starr G. Wilson Cyde D. Workman	Aug. 15	Calvin B. Adair Elizabeth Fitz Alice Fountain Hattie T. Hall Clara L. Krause Minna M. Merriam Joseph S. Ulm Harriet Wood Mae L. Toomey Arlynn M. Dance Coralie Dwinell Clara Mead Sina Olsen Bessie Granger Sabra Harrington Leo H. Paulger Royal Smalley Lida Updegraph Rachel M. D. Iph Florence Mapes Lela Blaine E. H. Downey Newell E. Johnson R. C. Kelley Lou C. Landers C. F. Mueller Lynn Anderson Fred Deming Hattie Drake C. F. Eakins Minnie Evans W. B. Grege Mabel Huffman Mira Jensen C. R. Laraway Mary Llewellyn Edna McMullen Lillian L. Mitchell E. J. P. Ilork A. N. Smith Marv E. Smith Edwin M. Westbrook C. C. Willard Frank S. Willy Howard S. Wolf Daisy Longman Roland Mevers Sadie Prose Florence Aldridge Le Roy Anderson Nellie M. Fox F. D. Imlay Edith Norton Isabelle Tripp Alice P. Woodford Adeline Crickett

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1905		1905	
Aug. 15	Mary S. Moore R. H. Williams Matie Alexander Myrtle E. Anders Berton L. Bankert Hanna Clendenon Alice G. Edgerly Nellie M. Emmons Emma J. Fordyce Elizabeth M. Gill Florence E. Graham Laura R. Graham Charles C. Gray Mary D. Hall Alice E. Kepler Lucie E. Lukeus Ida I. Morris Emma C. Moulton L. T. Newton John F. Overmeyer Ella M. Payton Edith L. Phillips Edna S. Poorbaugh John J. Rae Harriet M. Rankins Lillian Rogers Anna B. Romig Caroline Schichtl Nellie R. Schroeter Nettie M. Siders Tillman Smith Harris W. Smith Harriet M. Stephens Mamie St. George Hillem Taylor Mary H. Wickware Lillian E. Waite Lulu Washburn	Aug. 15	Daisy Estella Wood Ethel M. Estebrook Arthur M. Gray Hattie W. Hibbin Lena Hoffman Flora E. Smith Jennie A. Stiles Janet Wilson David Williams Ellen J. Wing Bertha V. Wyant
		1905	
		Sept. 1	Zetta Brewer I. M. Boggs Lavinia Mowrey Lulu Mills W. H. Kent Amy L. Clark James A. Eckenrod Stephen R. Ritz Katherine Manthe Albert S. Murray Louise Pashby Eva M. Saucer Frank M. Stotler Charles Murray Mabel M. Whitney Will Gossard Alvin J. Cavana Ruby Baughman Ida Reimer Leonard J. Salisbury Jessie Butterfield William C. Hicks Clara S. Rice Lawrence G. Focht Zulema Kostomlatsky

## PRIMARY STATE CERTIFICATES.

1903		1904	
Nov. 1	Mary Young	Jan. 1	R. May Pyne Gertrude Diemer Agnes Hannum Helen McGrath Lucie E. McNalley Elizabeth Penny Lavinia Forsythe Agnes Patterson Josephine Petheram
1903			
Dec. 1	Lenna Cowles Clara Lynn Harriet Riley Dora Trumbauer		
1904		1904	
Jan. 1	Una Grettinberg Ora Claytor Emma Forsythe	April 1	Clara E. Jones Ethyl M. Lyon

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1904 April 1	Blanche Stoddard Jane Kreigh	1904 Aug. 1	Florence McNeal Ida M. Marachal Alice Newstrand Myrtle Parkes Mary E. Reece Esther Ridley Anna Rhynsbarger Maud Rohlfson Minnie R. Rice Lida C. Sands Laura T. E. Specht Katherine Toole Maud Thompson Nettie E. Taylor Jessie R. Wyler Katherine Whitehead Lydia M. Wilbur Ella Wood Lillian N. Smith Mary Hoagland Allie B. LeFever Jessie M. Carter Anna O. Lothian Margaret Overholser Maud Logan Jennette N. Holden Edna M. Burroughs Minnie L. Brown Nellie Biem Ressa Damsdill Clara A. Long Pearl McDowell Claire Nugent Evalena Rist Mabel Rittgers Maud Webster Linda Westerman Albenia McDonald
1904 July 1	Edith Anderson Katie Boehmke Emma Buxbaum Jessie Bernard Ellen Clark Grace A. Cole Edith Gritman Gertrude Graham Georgiana Humphrey May Hiams Henrietta Hill Cora M. Jenson Catherine Kyle Florence McConnell Grace M. Ott Katherine Roome Mary L. Shafer Lulu B. Seyller Clara L. Van Pelt Floe Younkin Lillie M. Britten Alice B. Hawk Anna E. Sullivan Ruth A. Bowen Anna Butterfield Neva E. Curley Jennette Donaldson Minnie Kuencke Lucy H. Lorenz Mae Nellie Morris Ethel B. McCreedy Matte M. Rogers Sadie Mann	1904 Sept. 1	Lida E. Hewett Ethel E. Grover Minnie M. Nettcott Maud Anna Cash Emma Crisman Belle McConnell Kate G. McGuire Charlotte E. Sweney Nellie R. Swingle Mary L. Talbott Amelia Thompson Esther L. Adolphson Sadie Hazen-Gardiner Margaret Condon Lulu B. Ramsey Florence Nettie Rice Bessie G. Ward
1904 Aug. 1	Elizabeth Graves Katherine White Jessie M. Box Hulda Cremer Blanche Conn Bertha Conn Katherine Donlon Roma E. Fritsinger Emma L. Freyermuth Avis C. Grawe Cora L. Gullickson Alice K. Haynes Jennie Jennings Louise Kamauski Jennie Kelley Lydia Keep Erma Maxwell Rachel McCreedy Grace M. McKeen		

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1904 Sept. 1	Carrie M. Evans Ida H. Hoon Johana A. Linehan Anita McCune Mary Uhley Etta B. Wallack Emma M. Cash Mary A. Martin Hattie L. Wilson Ruth Van Husen Emma B. Hoon	1905 July 1	L. Josephine Miller Mac E. Patterson Nina Rice Mabel Rider Vera G. Titus
1904 Dec. 1	Fannie A. Foster Olive Gruver Minnie Markham Tillie S. Berger Maud Burris	1905 Aug. 1	Ina E. Groat Elizabeth Pomeroy Mabel Starr Cora A. Chamberlain Mary E. Edelen Jane Howe
1905 Jan. 2	Emma F. Booth Margaret Kelly Effie Ramsey Dorthea Zerwekh Clarice J. Baird Celia Potts Julia Jacobs	1905 Aug. 15	Julia C. Anderson Jennie M. Alton Bessie Benham Vera M. Bradley Helen Blackstone Belle Brown Nellie Burdinner Effie Cornell Claire S. Cook Margaret Cowden Dot Dillon Emma Davidson Martha M. Ensign Esther S. Faner Ester Fitzsimmons Estella Grayson Ethel L. Goodwin Della Granger Edith Gillon Myra L. Gault Lillian E. Hanson Ethel B. Lawrence Myrta I. Lyon Jennie L. Middleton Mary McDonough Nora McCullough Nellie M. Pollock Jeannette Ritchie Effie M. Williamson Katherine Stichter Pansy A. Stuart Grace E. Storm Martha Sweny Helen L. Snowden Jessie C. Smith Nellie Tompkins Lenore G. Titus Ethel E. Wyant Grace Pearson Estella Foster Winifred Jennings Clara Wagner Elnora Hart
1905 July 1	Grace Brakel Grace L. Bates Emma C. Curtis Ina M. Clump Eunice M. Calkins Alma B. Culp Elizabeth Carl Edna Detweiler Maud M. Davis Susie E. Fobes Nannie Gonzales Ruth McGregor Haines Nellie I. Harden Nellie Haskell Helen L. Lewis Gertrude McKone Grace Rogers Clara Richlefs Ida Shaw Addella I. Taylor Exene F. Taft Louise A. Watson Margaret Young Neva Bateman Alice Kinsley Anna Schneider Minnetta Smith Mae Williams Ala Brenton Blythe McCormick		

## STATE CERTIFICATES—CONTINUED.

Date	To Whom Issued	Date	To Whom Issued
1905 Aug. 15	Mary McLoury Carrie Sperling Anna L. Rathbun Helena Feeny Josephine Knox Florence Knox Margaret Luther Lydia Schulz Stella Peterson Bessie A. Stickney Kittie Townsend Avis Williams Lucy H. Meacham Frances A. Burns Grace L. Hoyt Margaret C. King Lillian Lee Barber Minnie Hanson Effie Stevens Weltha Speake May A. Scott Edyth Overmayer Madge M. Noble Mary L. Loveland Eva Jane Kephart Harriet Ingman Ella Z. Huffman Minnie K. Hindman Carrie M. Hawver Sara L. Hart Anna Grace Martha Garrison Alice R. Davies Adeline Currier Orpha E. Crook Nannie E. Crawford Eleanor A. Canty Sadie Batten	1905 Sept. 1	Edith G. Clark Harriet Clark Ruth Clark Mattie C. Collins Margaret Condon Edith Cooper Florence Drake Ethel Gibbs Edith Glasson Gladys V. Hall Bertha Hinds Abbie L. Hunter Vera B. Jeffries Ellice Langfitt Kate Lisor Lulu MacWilliams Elizabeth Prescott Sadie Pyle Bernadine Rehker Daisy Rice Della Rust Nellie J. Sillick Jessie Snook Edna Squires Bertha Heller Laura L. Lynch Winifred MacFarland Edna Harrington Adah M. Jandt Maud I. Sanford Ruth Lawrence Laura Shurtz Irene Taylor Mary E. Pendray Hazel E. Phillips Lizzie Washburn Mary I. Robinson Christie A. Todd Emma Kalb Olive G. Reeve Harriet Carpenter Nellie C. Thompson Ethel E. Smith Helen Johnston Lulu B. McCorkle
1905 Sept. 1	Vida Griffith Lillian Kosier Ila Bertram Blanche Bauserman Anna Brown		

## SPECIAL STATE CERTIFICATES

1904 July 1	Maud L. Popp drawing	1905 Aug. 15	Estelle B. Renne music
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## STATE CERTIFICATES—CONTINUED.

## TWO-YEAR STATE CERTIFICATES.

Date	To Whom Issued	Date	To Whom Issued
Aug. 15	D. F. Shepherd Grace Shore Roy Snodgrass Grace Farewell Ralph Roberts Viola E. Smalley Isabelle Wilder Edwin K. Mapes Anastion Paul Francis Schwendemann Florence Fenner Minnie Harmsen Leah Riker E. R. Hutchisson	Aug. 15	Nell Dally Alice Divelbess Ethel Hill Anna Longman Elizabeth McDonald Ida Pearce Jaqueline Platt
		Sept. 1	Ray Snodgrass Carrie S. Taylor
		Sept. 15	Martin Mikish Marguerite Moore J. R. Thorgrimson

## SPECIMEN LISTS OF QUESTIONS.

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STATE DIPLOMA.

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GEOMETRY.

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1. Prove: The straight line joining the middle points of two sides of a triangle is parallel to the third side, and equal to one-half of it.
2. Prove: The sum of two opposite sides of a circumscribed quadrilateral is equal to the sum of the other two sides.
3. Construct a square having given the diagonal. Explain.
4. Prove: If through a fixed point, without a circle, a secant and a tangent are drawn the product of the whole secant and its external segment is equal to the square of the tangent.
5. Prove: The area of a parallelogram is equal to the product of its base and altitude.
6. State and prove the Pythagorean theorem.
7. Inscribe a square in a given circle.
8. Prove: If the opposite angles of a quadrilateral are supplementary the quadrilateral can be inscribed in a circle.
9. Prove: If a straight line is perpendicular to one of two parallel planes, it is perpendicular to the other also.
10. Prove: The volume of a circular cylinder is equal to the product of its base and altitude.

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ZOOLOGY.

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1. Name and define the essential parts of an animal cell. What is the name of the group to which all one-celled animals belong?
2. To what sub-kingdom does the hydra belong? Make a sketch of one, naming the principal parts.
3. Name an animal belonging to the Echinodermata. Describe its water-vascular system.
4. Tell what you know about the anatomy of the clam, or fresh-water mussel.

5. What are the principal points of difference between a crustacean and an insect?
  6. Name and define the principal parts of the eye of a vertebrate animal.
  7. Name and define the class to which each of the following animals belong: fish, frog, turtle, bird, man.
  8. Define the following sciences: embryology, histology, morphology, paleontology, zoogeography.
  9. Name and locate the bones in the mammalian head.
  10. Describe the origin of the central nervous system of a typical vertebrate.
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### GEOLOGY.

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1. What is geology? What are the subdivisions of the science?
  2. What are rocks? Name ten of the common rock-forming minerals.
  3. Into what kinds and classes are rocks divided? What kinds are most common in Iowa?
  4. What is coal? History of a coal seam? To what geological age does the coal of Iowa belong?
  5. What useful minerals, besides coal, are found in Iowa? Where? In what geological formations?
  6. Construct table showing, in order of age, the successive geological formations as these are recognized in North America.
  7. What geological work is accomplished by rains? By rivers?
  8. Geological work of glaciers? Of icebergs? Of ice in general?
  9. Geological work of the atmosphere? What gases are most active in effecting geological changes?
  10. What geological work is accomplished by plants and animals? Describe especially the work of marine animals.
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### ASTRONOMY.

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1. Explain what is meant by a sidereal day, a solar day. Which is the longer?
2. What is the form of the orbits of the planets? By whom was the law of orbits discovered?

3. Explain the fact that the same side of the moon is always visible to the earth. Have we any proof of the existence or non-existence of an atmosphere upon the moon?
4. Give the distance and dimensions of the sun. Describe a sun spot. Give a probable explanation of the source of the sun's continued heat. What is meant by the solar parallax?
5. Explain the cause of and the difference between a total and an annular eclipse.
6. What two great circles determine the position of the equinoxes? How would you explain to a student how to locate the vernal equinox?
7. Describe a comet? Does the same comet ever reappear after receding from the sun?
8. What are the asteroids? Give an explanation of meteorites.
9. Give a brief description of the refracting telescope.
10. Outline briefly the nebular hypothesis.

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### RHETORIC.

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1. Write twenty lines showing the province of rhetoric and the benefits to be derived from its study.
2. Discuss the several steps to be taken in producing an essay in their proper order emphasizing their relative importance.
3. Name three marked varieties of style and show how the subject treated should influence the style.
4. Name three of the most important qualities of style and show their relative importance in different kinds of discourse.
5. In ten lines discuss the origin and utility of figures of speech.
6. What is the province of imagination in literature? In science?
7. What is poetry? Its purpose? Its form? Its style?
8. Write fifteen lines criticising rhetorically the twenty-third psalm, beginning, "The Lord is my shepherd."
9. Which is more poetical, the twenty-third psalm, or the lines, "Thirty days hath September, April, June and November," etc., and why?
10. What is fiction? A novel? A romance? An epic poem? Name a good example of each in English or American literature.

## STATE CERTIFICATE.

READING.

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1. (a) Name some of the common defects in articulation and their remedies. (b) Suggest voice and tone training for oral reading.
  2. How may more satisfactory results in oral reading be secured?
  3. Discuss the value of Irving's sketches for supplementary reading.
  4. Name five books you would recommend to an eighth grade boy for reading.
  5. Discuss the value of biography.
  6. Who wrote the following: Sir Roger de Coverly Papers, Macbeth, Bleak House, Ivanhoe, The Raven, Kenilworth, Mill on the Floss, The Ancient Mariner, The Faerie Queen, Vanity Fair.
  7. Relate an episode from a standard novel.
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ARITHMETIC.

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1. Find the cost of carpeting a room 16 feet long and 14 feet wide with carpet  $\frac{3}{4}$  yard wide, costing \$1.50 a yard, if the strips run lengthwise and  $\frac{1}{4}$  yard is allowed on each strip for waste?
2. My tax bill is \$162.80 which includes a poll tax of \$2. The rate of taxation is \$13.40 on \$1,000; for how much am I assessed?
3. The longitude of Sandy Hook is 74 degrees west, that of Queens-town, 8 degrees, 7 min., 30 sec., west. A steamer makes the run between these points in 5 days, 20 hours. If she passed Sandy Hook at 5 p. m. June 15, when did she arrive off Queenstown?
4. (a) A corporation sends its agent \$4,590 including commission at 2 per cent, with which to buy sugar. If 75 tons are obtained, what is the cost per pound? (b) What part of a rod is 2 feet 9 inches?
5. (a) Two ropes one 42 feet long and the other 50 feet long, are fastened 30 feet above the ground to a pole and stretched to reach two stakes on opposite sides of the pole; how far are the two stakes apart, the surrounding ground being level? (b) Which is the better investment and how much per cent, Chicago and Southern Michigan costing 60 and paying a dividend of 4 per cent, or Connecticut River costing 200 and paying a dividend of 8 per cent?
6. A and B can do a piece of work in 12 days, B and C in 9 days, A and C in 6 days; how long will it take each alone to do it?
7. A dry goods firm sold \$45,000 worth of goods in a year; 2-5 of the receipts were sales at 20 per cent profit,  $\frac{1}{2}$  at 25 per cent profit, and the rest at 33 1-3 per cent profit. What was the cost of all the goods?

REPORT OF THE  
GEOGRAPHY.

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1. Locate the chief mineral deposits found in the United States.
2. What service does the United States weather bureau render to commerce? To agriculture?
3. What is meant by Standard Time? Why is the system necessary?  
  
(b) Where and what is the International Date Line? What change in reckoning is made in crossing the line?
4. Name three European countries which have large colonial possessions and a colony of each.
5. What and where is each of the following: Havana, Cairo, Rio Janeiro, Nile, Bering, Ceylon, Odessa, Panama, Yokohama, Manila?
6. In what way can the study of current events be used to develop an interest in Geography?
7. Explain the Iowa land survey.

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GRAMMAR.

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1. Distinguish clearly between finite and non-finite verbs by their use in sentences of your own composition. Classify sentences as to their form, giving an illustration of each.
2. Point out the logical subject and the whole predicate in each of the following sentences: (a) How close he stands to nature! (b) Bear ye one another's burdens. (c) It is base to steal. (d) There was a great deed done here. (e) Fie! A soldier and afraid.
3. Analyze: In Holland the stork is protected by law because it eats the frogs and worms that would injure the dikes.
4. Define (a) descriptive adjective; (b) dependent element; (c) phrase; (d) idiom; (e) antecedent; (f) inflection; (g) expletive.
5. Use in sentences the plurals of these nouns: (a) plus; (b) mouse; (c) sheep; (d) Miss Clark; (e) son-in-law; (f) glass; (g) trousers.
6. Parse *back* in each of the following sentences: (a) He turned his back upon us. (b) They lived in the back settlements. (c) Come back. (d) Back the wagon out.
7. Write a sentence whose subject is (a) an infinitive (b) a clause.

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BOOKKEEPING.

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1. Explain how the record of notes is kept. What are bills payable?

2. Explain the two methods of writing the cash book.

3. E. C. Kelly commenced cash business with a capital of \$9,000; May 2, bought for cash a house and lot, \$1800; May 3, bought for cash, 8 tons of coal \$50; May 4, bought for cash 10 bbls. pork @ \$8. May 5, paid cash for mdse. \$286.20. May 6, sold for cash 300 pounds of sugar @ 5c; 4 bbls. pork @ \$9. May 8, bought for cash, mdse. \$640. May 9, paid cash for Chas. Cook's order on me \$75. Sold for cash, 115 bu. potatoes @ 50c; 10 bbls. flour @\$5.80; 40 bbls. Pork @ \$8.50. May 10, sold J. Long 50 lbs. tea @ 20c, 20 lbs. coffee @ 25c, 60 lbs. sugar @ 5c. May 11, paid cash for drayage \$16.75. May 12, paid cash for clerk hire \$40. Write up the cash book and give the cash balance.

4. When should the expense account be credited? Under what conditions would the expense account show a gain?

5. Write an order. What are the liabilities of a firm? When is a firm just solvent and when insolvent?

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PHYSIOLOGY.

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1. Give the structure and functions of cartilage and connective tissue.

2. Discuss the red and the colorless corpuscles and state the cause for the clotting of blood.

3. Discuss the ileo coecal valve, the peritoneum and mesentery and pleura.

4. Discuss the structure of perspiratory glands; also the function and regulation of perspiration.

5. State the effects of alcohol and tobacco on the heart and on the stomach.

6. Discuss reflex action as to character, functions and centers.

7. Discuss short sight, long sight and astigmatism as to causes and remedies.

8. Discuss consumption as to the character of the disease, preventives and treatment.

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U. S. HISTORY.

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1. Discovery of Mississippi River and early explorations of Mississippi Valley.

2. Articles of Confederation, adoption, character, defects, state of country under them.

3. Mexican War, causes, leaders, two important battles, results.

4. How were the funds obtained by national government to meet expenses of War of Secession?

5. Account of battle of Gettysburg.

6. Sherman's march to the sea.

7. What were the points at issue in the presidential election of 1868?

8. Oklahoma.

9. In what way has the following territory been acquired: Iowa, Alaska, Florida, Texas, Illinois?

### ALGEBRA.

1. Factor and find H. C. F.

$$x^3 - 8x^2 + 7x - 18, x^2 - 8x + 12$$

2. A number of three digits is in value between 400 and 500, and the sum of its digits is 9. If the digits be reversed, the resulting number will be 36-47 of the original number. What is the number?

3. Divide

$$(a.) 6x^{\frac{1}{2}} + 9x^{\frac{1}{2}} - 2x^{-1} - 13 \text{ by } 3x^{\frac{1}{2}} + 2x^{\frac{1}{2}} - 5.$$

(b.) Solve

$$\begin{cases} x - y = 3 \\ \frac{1}{y} + \frac{1}{x} = \frac{1}{2} \end{cases}$$

4. Find the value of  $(1-ax)(1-bx)$

$$\left\{ 1 - (a+b)x \right\} \text{ when } x =$$

$$\frac{1}{a} + \frac{1}{a} \left\{ \frac{1}{a+b} - \frac{1}{a+b} \right\}$$

5. (a). Find square root of

$$19 + 8\sqrt{3}.$$

(b.) Solve

$$\begin{cases} \frac{x+y+3}{x-y-3} = -1\frac{1}{2} \\ \frac{x-y-3}{x-y+3} = -2 \end{cases}$$

6. Solve

$$\sqrt{x-1} + \sqrt{x-4} = \sqrt{x-1}.$$

7. Separate the number 3696 into two factors such that if the smaller is diminished by 4 and the larger increased by 7 their product will be the same as before.

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### BOTANY.

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1. What is the difference between a spore and a seed? Name two spore-bearing and two seed-bearing plants.

2. Define angiospermous plants. Consider especially the structure of the flower and stem. Give example.

3. Define pollination. What are the three principal agencies concerned in it? State the general character of the flowers fertilized by the aid of each of these three agencies.

4. What are the functions of the calyx and corolla? Are both these parts present in all flowers?

5. Define assimilation and respiration in plants. Under what conditions may each take place? What is the result?

6. Why are the anemone, butter cup, columbine, and hepatica classed together. The apple and the cherry? The oak and the hazel?

7. In what way does topography affect the distribution of plants? Illustrate by examples.

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### PHYSICS.

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1. An engine raises uniformly 20 lbs. water 300 ft. every minute. What is its horse power? What is the momentum of the water? Its kinetic energy?

2. Describe a barometer and its action.

3. Define the latent heat of fusion. What seemed to justify the term latent heat?

4. What is a beat in music? How many beats per sec. will be heard when two tuning forks make 250 and 256 vibrations each per sec.?

5. Show by diagram the position of the image of an object (an arrow) which is placed in front of a plane mirror.

6. Give the law of magnetic attraction between opposite and like poles. Give the law of electrostatic attraction between like and unlike electric charges.

7. State how an electric current is used to produce a magnet.

**REPORT OF THE**  
**DRAWING—REGULAR.**

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1. Draw a group of objects which will show your knowledge of perspective.
  2. What relation does drawing sustain to other studies?
  3. What does a child gain from the study of pictures? How do you conduct a picture study lesson?
  4. Why should drawing be taught in public schools?
  5. Give a list of type forms which should be used in drawing classes.
  6. Why is mass drawing used? Draw a group of objects in mass.
  7. Illustrate a quotation.
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**CIVIL GOVERNMENT.**

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1. When did permanent immigration into Iowa begin? What are some of the oldest towns in the state? When did Iowa become a territory? A state? Name some of the early governors.
  2. Describe the various school corporations. By whom are they organized? When are school officers elected? Town and city officers? State officers?
  3. (a) What is the biennial election amendment? (b) When was it passed? (c) How may the constitution be amended?
  4. By whom and for how long are the following officers elected or appointed; (a) Secretary of State; (b) State Senator; (c) County Supervisors; (d) Sheriff; (e) Mayor; (f) Secretary of School Board; (g) President of the State Normal School; (h) President of State University; (i) Board of Control; (j) Railway Commissioners.
  5. Give arguments for and against choosing United States Senators by the people.
  6. What is a "pocket veto?"
  7. Name five powers denied to the several states by the constitution.
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**ECONOMICS.**

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1. Can a knowledge of Economics aid in any way in the solution of civic and industrial problems? How?
2. What is a marginal utility? What is the relation between the marginal utility and the supply of a commodity?

3. What is debased money? Flat money? Inflated currency? Give Gresham's Law. How may credit increase the volume of business without increasing the volume of money? Illustrate.

4. Define capital. Name and illustrate two kinds of capital. What represents a farmer's capital? Are a workman's clothing and food capital? Why?

5. Has the present extensive system of advertising any economic importance? Discuss fully.

6. What is the distinction between salaries and wages? Do practicing physicians and attorneys receive salaries or wages for their services?

7. Why would not a protective tariff be as beneficial to Holland as to the United States? Why is it necessary to revise tariff schedules frequently?

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#### MUSIC—REGULAR.

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1. Why should music be taught in the public schools? (Discuss.)

2. How much time should be given daily to music work in the grades? Where a special music teacher is employed should she be entirely responsible for the government in the room during the music period?

3. In introducing music into the upper grades and the high school what should be emphasized at first?

4. What should a child do in music during his first year in school?

5. Write the major scale in D, B flat and A flat.

6. Write the chromatic scale in the key of E.

7. Write the harmonic minor scale in C minor and B minor.

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#### SCHOOL MANAGEMENT.

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1. Name exercises which may be profitably used in memory training.

2. "The training of the power of attention is one of the most important points in education." Justify the above statement.

3. What is the place of compulsion in school discipline?

4. What special points relating to the physical well-being of the pupils should receive the teacher's careful attention?

5. Define (a) instruction, (b) organization, (c) discipline. Show their mutual relation.

6. Show how correct methods of study on the part of the pupil lead to correct habits in later life.

7. After examination papers have been marked should they be returned to the pupils? Give reason for your answer.

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### PSYCHOLOGY.

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1. Define (a) conception, (b) judgment, (c) reasoning.

2. Define (a) attention, (b) memory. State relation between them.

3. "Observation before reasoning." Define the terms and show the necessity of proceeding as indicated above.

4. (a) What is the source of material used in imagination? (b) Show what part imagination plays in sympathy.

5. Define (a) voluntary attention, (b) involuntary attention.

6. Show how a knowledge of psychology is valuable (a) in arranging a course of study; (b) in devising methods for teaching any particular subject.

7. State and illustrate the relation of memory to creative (or constructive) imagination.

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### SCHOOL LAW.

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1. Give five duties of the State Superintendent. What is his term of office? His salary?

2. How is a new School Board organized? When? Name four duties of the President of the Board.

3. For what reasons may a pupil be expelled by the Board? Name the three kinds of school funds.

4. State five important powers of School Boards.

5. What legal steps are necessary to procure free text-books in a school corporation?

6. In case a teacher is discharged by the Board, to whom may an appeal be taken? Give the process.

7. To whom must the teacher make reports? What must these reports show?

EDUCATIONAL THEORIES.

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1. What is the purpose of manual training in our schools?
2. Name two books that have had a marked effect upon education and give main features of one of them.
3. What are the principal points of difference between ancient and modern education?
4. Describe the educational work of Froebel and his influence on subsequent education.
5. Give educational doctrine advanced by Herbart.
6. Tell what Horace Mann did for the schools of the United States.
7. Give an account of the beginning and development of sense training in primary teaching.

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PRIMARY STATE CERTIFICATE.

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CHILD PSYCHOLOGY.

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1. Name the mental powers in the order of their development. Which of these may be said to be more prominent in childhood from four to ten years of age?
2. Name three marked characteristics of childhood aside from the manifestation of the mental powers named in No. 1.
3. Can you distinguish between "moral faults" and "intellectual faults" in children?
4. Describe the emotion of fear as it exists in children and give some directions as to its treatment.
5. Discuss the fascination which color, tone, form and rhythm have for children.
6. Do children reason? Explain.
7. Is a 6-year-old child a selfish or a social being? Explain.

**REPORT OF THE**  
**SCHOOL MANAGEMENT.**

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1. Why does a primary teacher need special professional training for her work?
  2. Give five objects of the recitation.
  3. How much individual help is it wise for the teacher to give pupils?
  4. Give five suggestions for the proper heating and ventilating of the schoolroom.
  5. What are some of the bad consequences of disorder in school? Name four elements of governing power in the teacher.
  6. Name five forms of hand work suitable for primary grades. What is the value of such work?
  7. Name some of the most prominent interests of children and show how the teacher may utilize these interests in her class work.
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**HISTORY OF EDUCATION.**

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1. What principles characterize modern education? Give the time when and by whom advocated.
  2. Who wrote "Emile?" What doctrines in it were new for education?
  3. What use did Froebel make of play in teaching? Why?
  4. Give main points in the present school system of France.
  5. Write a short sketch of the life and work of Horace Mann.
  6. What benefit do you expect to derive from a study of History of Education?
  7. What is our National Bureau of Education? Who is its head? How does it aid in educational work?
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**SCHOOL LAW.**

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1. What are the three kinds of school corporations? How many directors constitute the Board in each?
2. What was the origin of the "permanent school fund" in Iowa? On what basis is the interest on this fund apportioned?
3. On what school questions may women vote? In whom does the law vest the power to fix teachers' wages?

4. What two important restrictions on the power of the teacher to dismiss a pupil from school?

5. Give four powers of the School Board with reference to school-houses and school property.

6. Give the duty of the teacher in regard to keeping a daily register and making reports.

7. Name the five provisions of the school law that you think it most important for a primary teacher to know.

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### HISTORY OF EDUCATION.

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1. Speak of the educational work of (1) Luther, (2) Francke, (3) Locke.

2. Discuss historically the origin and growth of the idea of the public school supported by the state for all children.

3. In what way has the United States aided, and how is it now aiding, the several states in their educational work?

4. Write of the work of Pestalozzi at Yverdon.

5. To what extent have we compulsory education in Germany, France, England, United States, Iowa? What reasons are given for it?

6. In what ways did Horace Mann benefit the schools of the United States?

7. What is Herbert Spencer's estimate of the value of music and drawing in the course? What reason does he give for this estimate?

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### DRAWING—PRIMARY.

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1. To what powers of the mind does drawing appeal?

2. Draw a group of two or more objects resembling a cube and cylinder and state principles to be observed in good grouping.

3. How would you give a lesson in clay from animal subjects? What should be the aim of such a lesson?

4. What kind of subjects should be given in primary grades in picture study? How would you relate these to the school year?

5. Mention some story which may be illustrated by the children. Make a drawing which you would use in illustrating this.

6. Make a constructive (mechanical) drawing of a square prism 2 by 2 by 4 showing three views.

7. Make a landscape drawing in two or three tones.

PLANT STUDY.

1. Name a plant of common occurrence and of general interest in blossom in April, one in June, one in September.
2. In what way are some plants dependent upon insects? Name one or more such plants and the insects upon which they depend.
3. What are cotyledons? Ovules? Sepals? Root stalks? Petioles?
4. Name some plants that have bulbs or tubers. That have seeds.
5. Give a list of ten trees which you know and give that for which each is especially valuable to man.
6. Briefly state the method of conducting plant study in primary grades which you would employ.
7. Why are some plants rarely infested by insects?

MUSIC—PRIMARY.

1. Write all the notes and rests in common use. Illustrate three different kinds of time and locate the accent in each.
2. Write the major scale in D flat and B.
3. Write the minor scale in F minor and C minor.
4. Write the chromatic scale in the key of E.
5. Give three common faults in teaching primary singing and tell how they may be corrected.
6. Name the characteristics of a good rote song and tell how to teach it to a first primary grade.
7. How would you teach the scale to a primary class? Give a device for class work in ear-training.

PRIMARY METHODS.

1. Write a short plan on the development of one-half, involving oral and written expression.
2. State the characteristics of good primary arithmetic.
3. What improvements should be made in methods of teaching reading.
4. How would you make reading appeal to the child's emotional nature?
5. How should incorrect habits of speech be changed?
6. Tell how you would make nature study the basis for composition work.
7. How can we make number work less formal?

Two year state certificate questions for first county certificate are used.

## IOWA TEACHERS' READING CIRCLE.

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The year 1905-06 is the sixteenth year of the existence of the Iowa Teachers' Reading Circle. Its membership comprises teachers in almost every county in the state, and one or more of the books on the list is being studied by all grades of teachers in the city schools to the beginning teacher in the country.

The function of the Reading Circle is well shown by this range of membership, hence it is seen that it is performing a work that is not and cannot be performed by any other existing agency.

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### PURPOSE.

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The purpose of the Teachers' Reading Circle is to provide for the teachers of the state a uniform course of reading and study for home work along professional and general culture lines. Accordingly, there is adopted each year, by the State Reading Circle Board, a set of two books for the year's readings. While the membership is purely voluntary, it should include all the teachers of the state. The course will adapt itself to teachers of all grades in country or in city schools. Neither teachers nor school officers can afford to ignore the recognition which this organization has received, or its claims upon the great body of Iowa's educational workers.

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### PLAN OF WORK.

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This contemplates much more than a rapid and casual reading of the books adopted. It means careful re-reading and study, distributed as evenly as possible throughout the year. While the work is continuous, the reading for any four years, if satisfactorily performed, will entitle the member to a diploma. This diploma should have value as indicating four years of studious advancement, which cannot fail to add to the teacher's ability and efficiency.

## REPORT OF THE MEMBERSHIP.

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The Reading Circle membership is made up of teachers in every grade of public school work and while the membership is purely voluntary, a number of teachers in almost every county in the state have enrolled, and are pursuing the work.

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## MANAGEMENT.

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The Reading Circle is under the control of a board of seven members chosen by the county superintendent's section of the Iowa State Teachers' Association, except the state superintendent who is *ex-officio* a member, and also its president.

This board meets annually and selects a course of reading for the teachers of the state. The course aims to include always one or more books on professional lines and one or more on general culture.

The books adopted for 1905-06 are:

For professional study, Putnam's Psychology, American Book Company, 521-531 Wabash Ave., Chicago, \$1.00.

Painter's History of Education, D. Appleton & Co., Wabash Ave., Chicago, Ill., \$1.00, and

Dewey's Lessons on Morals, Hindo, Noble & Eldredge, New York City, 40 cents.

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## BOARD OF MANAGERS FOR 1905-6

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Hon. John F. Riggs, President, Des Moines, Iowa.

Supt. Jos. E. Vance, Marion Iowa.

Supt. John P. McKinley, Treasurer, Sibley, Ia.

Supt. A. M. Deyoe, Garner, Iowa.

Supt. Lora L. Richardson, Mt. Ayr, Iowa.

Supt. Mary E. Hostetler, Marshalltown.

E. J. Hook, Secretary, Decorah, Iowa.

## BOARD OF EDUCATIONAL EXAMINERS.

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John F. Riggs, ex officio, President .....	Des Moines
George E. MacLean, ex officio .....	Iowa City
Homer H. Seerley, ex officio .....	Cedar Falls
Owen J. McManus .....	Council Bluffs
Maria M. Roberts .....	Ames
Viola H. Schell, Secretary .....	Des Moines

## STATE DIPLOMAS.

(Regular Examination Friday and Saturday following Thanksgiving.)

## I. GENERAL REQUIREMENTS.

1. In every case the applicant must have held an Iowa state certificate and have taught under the supervision of this board at least three years before applying for the state diploma, a life certificate.
2. Every candidate will be required to file the following credentials:
  - a. Documentary evidence from standard reputable educational institutions certifying to the special scholarship and training of the applicant.
  - b. Documentary evidence showing the standing and ability of the applicant as an educator. This evidence should cover recent work.
  - c. He should also refer to at least three persons of good scholarship and professional success, who are engaged in educational work, and who can vouch for his success and character.
  - d. Credentials should be original, of recent date, of specific character and addressed to the state board of educational examiners.

## II. SPECIFIC REQUIREMENTS.

1. In his registration blank, the candidate must certify that he has taught or studied all the branches that are required by law for the state diploma.
2. He must give, in detail, the places where he has done educational work.
3. He must file in his own handwriting, reasonably complete theses upon topics assigned from the following subjects: trigonometry, chemistry, political economy, general history, and English literature. In every case these theses must be fully outlined, and be accompanied by a bibliography of the topics considered.

4. The theses will be marked by such persons as the board may designate on the following points:

- a. Correct use of the English language.
- b. Choice and arrangement of subject-matter.
- c. Thought and expression.
- d. Originality and research.
- e. General appearance of the manuscripts.

### III. EDUCATIONAL REQUIREMENTS.

1. State certificate subjects as required by law and evidenced by the state certificate.

2. Formal written examination in geometry, zoology, geology, astronomy and rhetoric. The board of examiners may meet the candidates in an oral examination in any or all of the subjects mentioned.

3. In addition to the above, an oral examination will be given in psychology, history of education and school supervision.

### REGULAR STATE CERTIFICATES

For the information of those desiring to become candidates, and to encourage the professional preparation of teachers, the board has classified candidates for state certificates under the following heads and established the following requirements:

### CLASSIFICATION OF CANDIDATES.

1. First certificate.
2. Renewal of certificate.
3. Subsequent renewals.

### 1. REGULATIONS GOVERNING APPLICANTS FOR FIRST CERTIFICATES.

#### i. CLASSES OF CANDIDATES.

- a. Graduates of higher institutions of learning.
- b. Graduates of state normal schools.
- c. Graduates of good schools where they have pursued a two years' course in didactic subjects.
- d. Other candidates.

a. Graduates of the College of Liberal Arts of the State University who have pursued in addition to the course in psychology, a pedagogical course of at least one year, and graduates of other liberal arts colleges with equivalent courses approved by the board, will be admitted to the examination upon filing certified statements given by the president or registrar of their graduation, and of their record in the pedagogical course.

Note—It is important for all applicants for state diplomas to remember that great value will be attached to the use of the English language in all the papers filed as part of the scholastic examination.

Those graduates of the state university or other colleges having equivalent approved courses of study, who have not had pedagogical work as stated above, will be admitted to the examination upon proof of one year's successful experience in teaching.

b. Candidates who are graduates of the state normal school or of other schools requiring equivalent courses approved by the board, giving one year of special training in a well organized training school, will be admitted to the examination upon filing certified statements given by the president or registrar exhibiting those facts.

c. Candidates who are graduates of good schools, whose courses of study are approved by the board, and who have pursued a two years' course in didactic subjects, consisting of school management, elementary psychology, principles of education and methods of instruction, will be admitted to the examination on making proofs of one year of thirty-six weeks of successful experience. When in addition to the above didactic course, such candidates have also had a year of special training in a well organized training school, they will be admitted to the examination without further qualification.

d. Other candidates will be admitted to the examination on filing official letters addressed to the board by one or more county superintendents and city superintendents, or other professional educators, including statements from the school boards under whom the candidate has taught, certifying to teaching covering at least two years of thirty-six weeks each of successful experience.

## II. DOCUMENTARY EXAMINATION.

1. Each candidate proving experience must file the following credentials as the official proofs of being qualified to hold a state certificate:

- a. Official letters addressed to the board, by one or more county superintendents and city superintendents, or other professional educators, certifying to the success of the applicant in government and instruction. The work thus commended must have been done under the person's supervision who certifies to his excellence or he may so certify from his personal knowledge of the candidate's character and success.
- b. Statements from the school boards for whom the candidate has taught, certifying to teaching covering at least two years, of thirty-six weeks each, in which good and successful service was rendered. Credentials should be original, explicit in character, of recent date, addressed to the state board of educational examiners.
- c. County superintendents, city superintendents, professors in normal schools and colleges holding positions in the state of Iowa, will be admitted to the examination on proof of character alone.
- d. To be assured that the candidate is successful in instruction and government, the board reserves the right to investigate until all doubt is removed.

### III. PLAN OF THE EXAMINATION.

1. **Preliminary.** The application blank properly filled out, the fee of three dollars, and the credentials required must all be filed with the president of the board. Consideration will then be given to the case and notification sent to the applicant previous to the examination

2. **Place of Examination.** The candidate receiving this formal notification of admission to the examination, is authorized to present the same together with other correspondence from the board to the examiner in charge of any stated or special examination held by the board.

3. **Character of the Examination.**

- a. Oral examination in subjects selected by the examiner. This work to cover not more than one half of subjects required.
- b. Written examination to include the work in subjects omitted in the oral examination.
- c. Professional examination in school management, elementary psychology, school law, methods of instruction and the educational theories of Rousseau, Pestalozzi, Froebel, Herbart and Herbert Spencer.

4. Syllabi for school management school law, elementary psychology, methods of instruction and drawing may be found on pages 11 to 13 of this circular.

5. The examination will be both oral and written at the discretion of the examiner in charge, not more than one half being oral. The following schedule may be expected with modification as circumstances may require:

**First Half Day.**

**Oral.**  
Civil Government.  
Economics.

**Written.**  
English Grammar.  
Arithmetic.

**Second Half Day.**

**Oral.**  
Geography.  
Music.  
Reading.

**Written.**  
Algebra.  
Drawing.  
Botany.

**Third Half Day.**

**Oral.**  
U. S. History.  
Physiology.

**Written.**  
Physics.  
Bookkeeping.

**Fourth Half Day.**

Professional examination, both oral and written. See "Character of Examination" page 5.

6. The examination in penmanship, orthography and English will be determined by the written work.

IV. Fees.. The examination fee is \$3, one-half of which is returned in case of failure.

## 2.—RENEWAL OF CERTIFICATES.

### I. PROOFS REQUIRED.

- a. The candidate must file letters from superintendents or other prominent educators that certify to the present success in instruction and in government, and to the fact that his present physical condition and mental and moral character are still such as to justify the board in granting him this renewal.
- b. He must also show by official letters from school boards for whom he has worked, the fact of his being successful as an instructor and as a disciplinarian under the expiring certificate.

Holders of state licenses to teach, desiring a renewal of the same, should file with the board an application, credentials, and fee of \$3, at least three months before the expiration of their certificate, in order that there may be sufficient time to issue a renewal before the expiration of the certificate. At the discretion of the board candidates who have taught successfully for five years under its supervision may obtain a renewal upon writing a satisfactory thesis upon a subject assigned by the board. In all cases the board reserves the right to require a full and complete examination. The thesis must in all cases be in the handwriting of the applicant, and must show professional study and investigation.

II. Examination Required—Unless otherwise decided, the candidate must appear at the time assigned and take such examination as the board may think necessary, but, where personal knowledge or acquaintance of the board with the applicant may permit, and where the first examination was good an original essay on an educational topic, assigned by the board, may be substituted for personal presence at the examination. This paper must be in the handwriting of the applicant, and must show professional study and investigation.

III. County superintendents, city superintendents, professors in normal schools and colleges holding positions in the State of Iowa, will be required to make proof of character alone.

### 3. SUBSEQUENT RENEWALS.

Subsequent renewals may be granted upon filing the credentials mentioned in I.

## PRIMARY STATE CERTIFICATES.

The Primary Teachers' Certificate is intended for primary teachers as a recognition of professional skill and successful experience. The holder of such a certificate will be authorized to teach in first, second and

third grades, in any public school in the state, for a period of five years. The fee, as fixed by law, is \$3, one half of which is returned in case of failure.

I. **Documentary Examination**—The following testimonials and credentials are required as evidence of success in primary teaching and of good character as a person.

1. Official statements addressed to the board of examiners from the present school board and from other boards certifying to the service of the applicant as teacher in first, second or third grade work for the period of two years or thirty-six weeks each.

2. Professional statements from county superintendent, city superintendent or village principal under whose supervision the applicant has worked, certifying to the particular and professional success of the applicant as a teacher of the first, second and third grade work.

3. Candidates who are graduates of good schools, whose courses of study are approved by the board, and who have pursued a two years' course in didactic subjects, consisting of school management, elementary psychology, principles of education, and primary methods of instruction, will be admitted to the examination on making proofs of one year of thirty-six weeks of successful experience in primary teaching. When, in addition to the above didactic course, such candidates have also had a year of special training in a well-organized primary training school, they will be admitted to the examination without other qualification. Candidates who are graduates of higher institutions of learning whose courses of study are approved by the board, and who have pursued during the junior or senior year of their course a year of pedagogical study, consisting of history of education and primary methods, will be admitted to the examination.

II. **Scholastic Examination**—To insure that the applicant has sufficient scholarship to be granted a primary teachers' certificate, the following things are required:

1. Such an examination in the branches, orthography, reading writing, arithmetic, geography, grammar, history of the United States, and physiology and hygiene, as in each individual case may be necessary to insure good scholarship in the applicant. In cases where the applicant is the holder of an excellent county certificate in force in regard to these branches, this scholastic examination may not be necessary. By sending to the president of the board the certificate, with grades, and any other documentary evidence that may assist in making the necessary proofs, this part of the examination can be determined before date of appearance before the board.

2. The examination in English will be determined by a thesis of at least one thousand words.

III. **Professional Examination**—The following subjects will constitute the professional examination required for the present year: Psychology of the child, school management, history of education, school laws of Iowa, primary methods, vocal music, physical culture, drawing and plant study.

IV. **Plan of Examination**—As preliminary, the application blank properly filled out, the fee of \$3, and the credentials mentioned in I and II, must be filed with the president of the board, to receive consideration and be approved before the written examination is given.

V. **Schedule of Time Granted**

**First Day.**

P. M.—1:30 to 5:00—Scholastic examination in case board requires same. See section II, note 1, in this circular.

**Second Day.**

A. M.—8:00 to 9:30—Psychology of the child. School management.

9:30 to 12:00—History of education. Schools laws of Iowa.

P. M.—1:30 to 4:00—Primary methods. Drawing. Plant study.

4:00 to 5:00—Vocal music. Physical culture.

VI. **Renewal**—See “renewal of certificate” and “subsequent renewals,” pages 6 and 7.

**TWO YEAR STATE CERTIFICATES.**

The law authorizing the state board of educational examiners to issue two-year state certificates was enacted by the Twenty-ninth General Assembly, and is as follows:

Chapter 115, section 3. **Certificates—fee.** Graduates of approved accredited schools who shall pass the required examination for a two years' certificate shall receive from the state board of examiners a certificate for two years, which may be renewed under such rules as said board may prescribe. Applicants for a certificate shall pay a fee of \$2 one-half of which shall be returned in case of failure.

The purpose of this law is to raise the educational standard for teachers in general, and especially for teachers of rural schools. As recognition of the work done and satisfactory examination passed, this certificate for two years, valid in any county in the state, is issued.

I. **Plan of Examination.**

1. **Preliminary**—The application blank properly filled out, the fee of \$2, and certificate of graduation should be filed with the president of the board previous to the examination, but may be presented to the examiner in charge at the time of the examination.

2. **Scholastic examination**—This examination embraces those branches required for a two-year county certificate, as follows: orthography, reading, writing, arithmetic, geography, grammar, history of the United States, didactics, physiology and hygiene, including special reference to effects of alcohol, stimulants and narcotics, elementary civics, elementary algebra, elements of physics, elementary economics, and music.

II. **Eligibility.** Only graduates of accepted courses of accredited institutions are eligible to take this examination.

III. **Fees.** The examination fee is \$2, one-half of which will be returned in case of failure.

IV. **Renewal...** See "renewal of certificates" and "subsequent renewals," pages 6 and 7.

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### SPECIAL STATE CERTIFICATES.

The law authorizing the educational board of examiners to issue special state certificates limits that authority to the following subjects:

Music.

Penmanship.

Drawing.

While the candidate must possess complete and technical knowledge of the special branch for the teaching of which a certificate is desired, some general education and culture will be required, as a certificate cannot be granted on account of proficiency in one subject only.

The holder of a special certificate will be authorized to teach the branch specified in any public school in the state for a period of five years. The fee as fixed by law, is \$3 one-half of which is returned in case of failure. Certificates will be issued to the same person in more than one branch, but the fee of \$3 must be paid for each, as no special certificate will authorize the holder to teach more than one subject.

I. **Documentary Examination**—The following testimonials and credentials are required as evidence of success as a teacher of a particular subject, and of a good moral character as a person:

1. Official statements from school boards; certifying to the service of the applicant as a teacher of the subject in which certificate is asked for a period of two years, of thirty-six weeks each.

2. Candidates who are graduates of good secondary or normal schools, and graduates of higher institutions of learning, may be admitted to examination upon filing certified statements given by the president or registrar of their graduation. It is to be understood, however, in all cases of reduction of time, that candidates have pursued scholastic and pedagogical courses approved by the board.

3. Professional statements from city or county superintendents, village principals, or other professional educators, under whose supervision the applicant has worked, or who have personal knowledge of the work done, certifying to the particular and professional success of the applicant as a teacher of the specified branch.

II. Preliminary Examination.—Proficiency in English will be determined by a thesis of at least one thousand words, subject to be assigned in harmony with the kind of certificate sought by the applicant.

III. Professional Examination—An examination will be required in each subject both upon knowledge of the branch itself and upon the methods of teaching it.

IV. Plan of Examination—As preliminary, the application blank properly filled out, the fee of \$3, and the credentials mentioned above, must all be filed by the candidate with the president of the board, in order to be admitted to the written examination.

V. Renewals—See "renewal of certificate" and "subsequent renewals," pages 6 and 7.

Note—All correspondence for special certificates should be addressed to the president of the board.

#### **General Suggestions to all Candidates.**

1. An examination for state certificate must be had before there can be an application for a state diploma. A teacher must do work under the supervision of this board for three years under a state certificate, before an application for a diploma can be considered.

2. Applicants will bear in mind that the possession of a state certificate, a primary or special teacher's certificate, or a state diploma, will not in any sense lessen their duty to comply with all the rules and requirements of the county superintendent of the county in which they are teaching.

3. Candidates are advised to arrive early at the place of examination, as no allowance can be made for delayed trains or for poor physical and mental condition, caused by illness or loss of sleep.

4. All necessary paper, pens, and pencils will be furnished each candidate at the time of the examination.

5. Lists of old questions are not sent out to applicants, as such questions are no guide to the next examination.

6. The law governing this board can be found in sections 2628-2634 of the code, and amendments enacted by the Twenty-seventh, Twenty-eighth and Twenty-ninth General Assemblies.

7. Applicants for state, primary state, two-year state, and special state certificates may be admitted to any examination fixed by the board. Diploma applicants will be given special examinations at times fixed by the board.

8. Remittances must be made by draft or money-order and made payable to John F. Riggs, President Board of Examiners and addressed to him at Des Moines, Iowa.

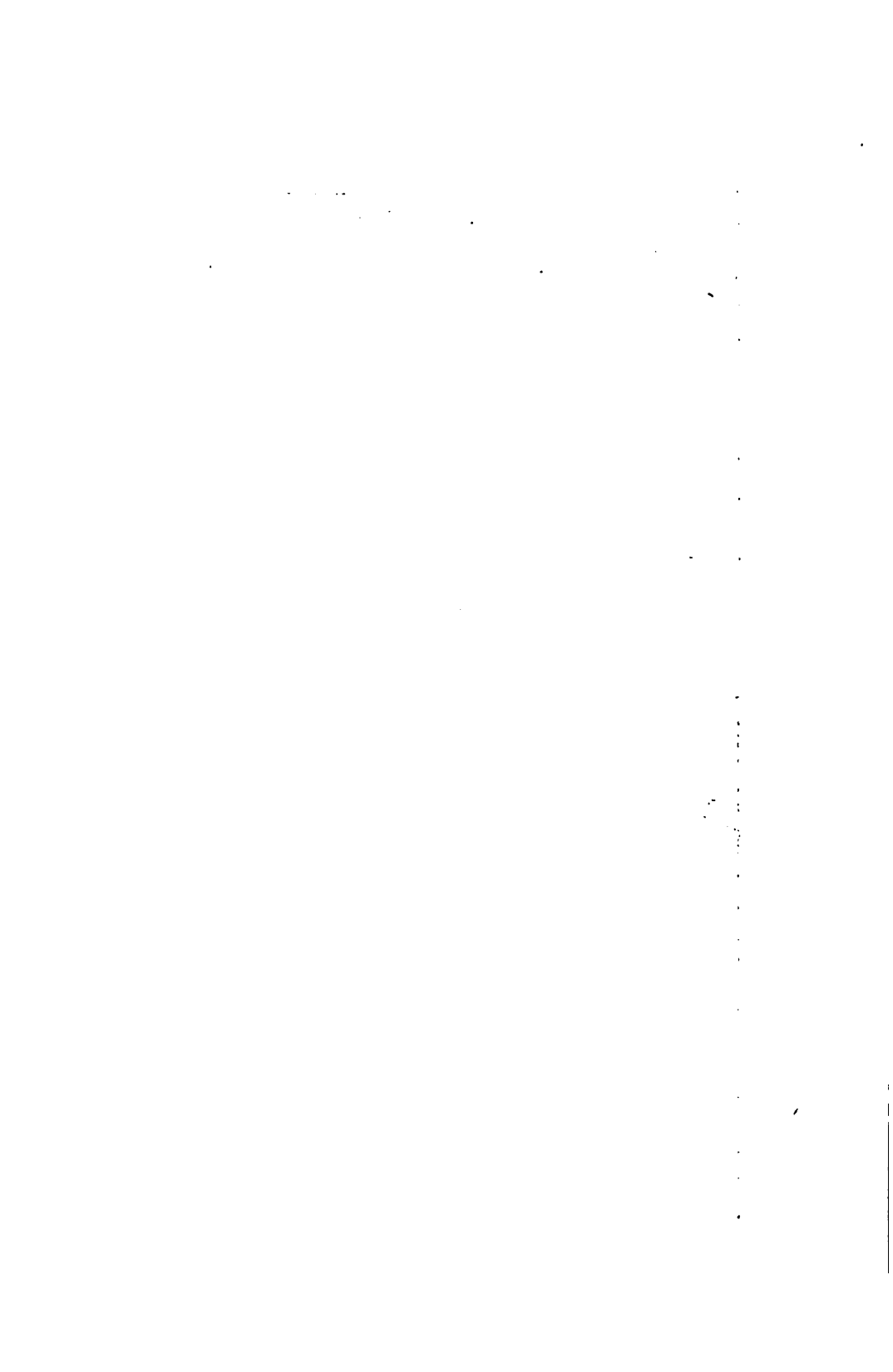
9. The law renders it impossible for the Board of Examiners to indorse, duplicate, or give credit for scholarship to holders of certificates or diplomas of educational institutions or other states.

Note as to Correspondence—In order to facilitate office work, graduates of the state normal school, and the state university, conduct their business correspondence regarding diplomas, and state certificates, with the presidents of their respective institutions.

All other official correspondence for the board must be with the president.

JOHN F. RIGGS,

President Board of Educational Examiners.

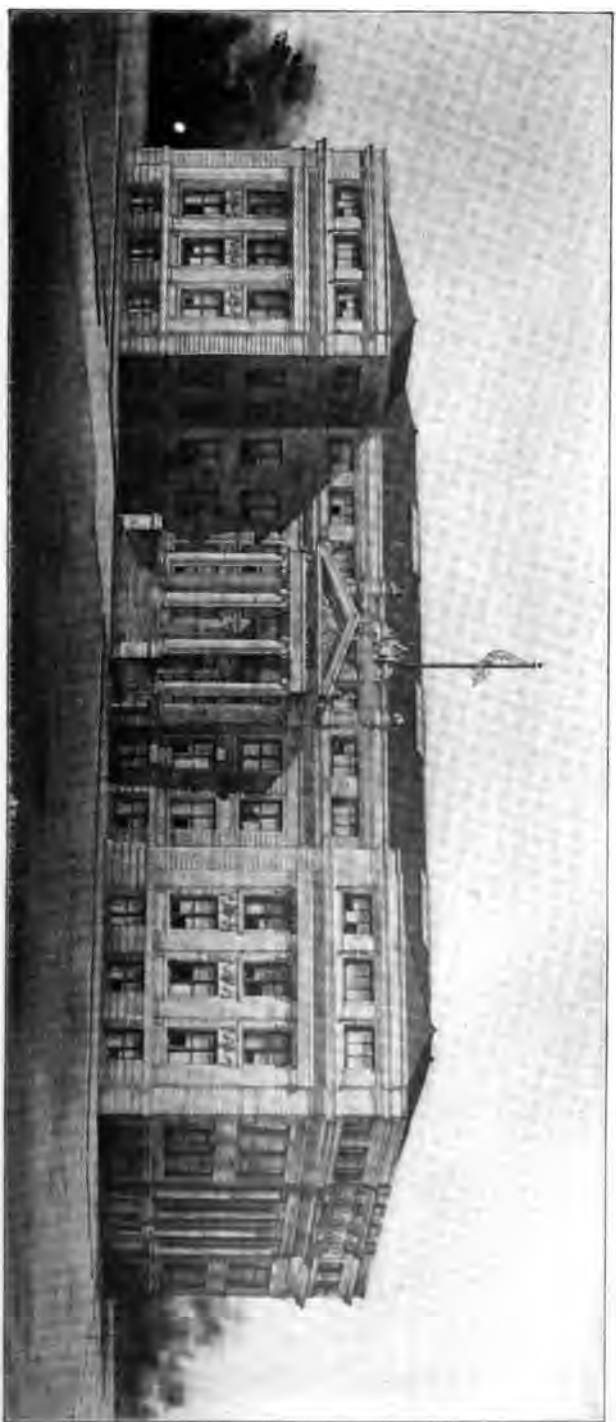




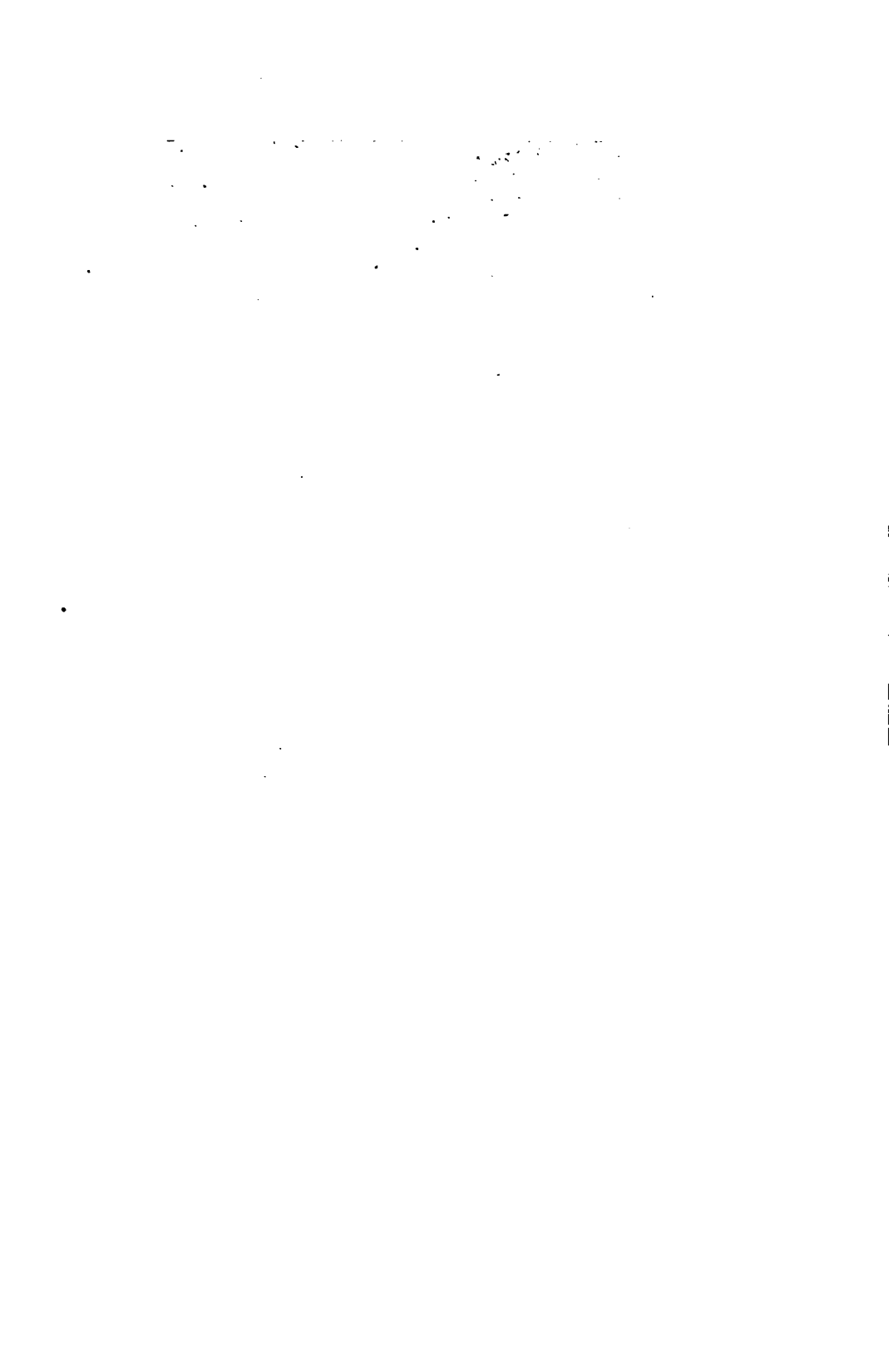
**FIGURE 8**  
**Rural School House, District No. 7, Grinnell Township,**  
**Poweshiek County.**



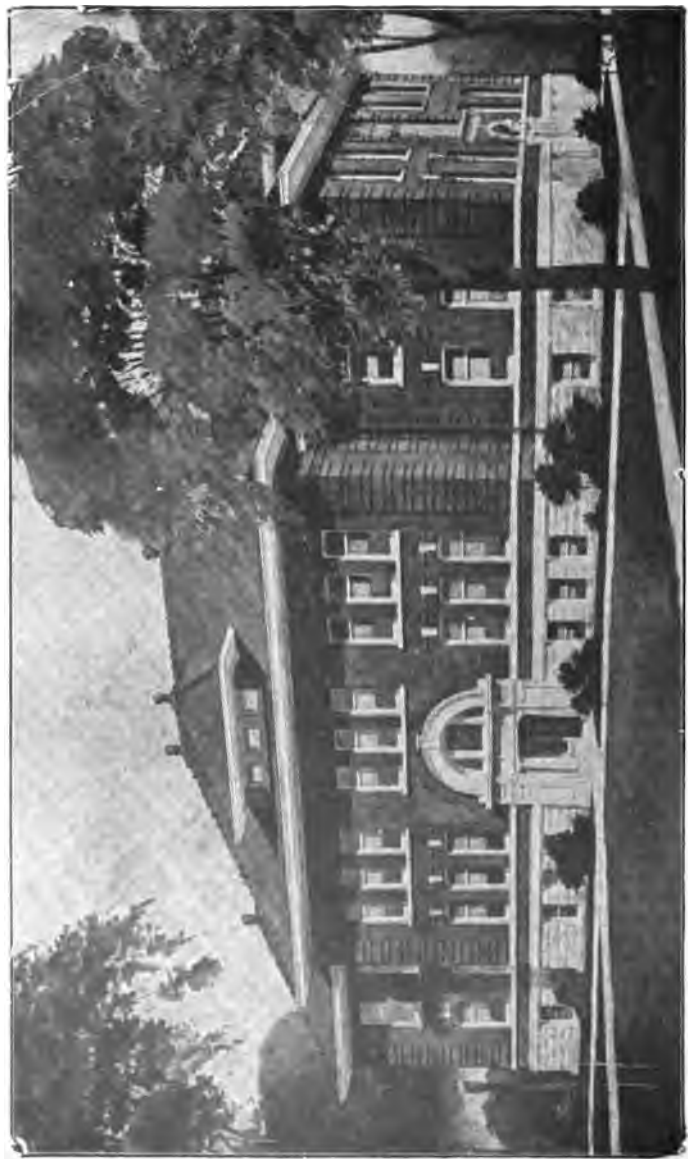
**FIGURE 9.**  
**District No. 8, Grinnell Township, Poweshiek County.**  
**Last day program and fair.**



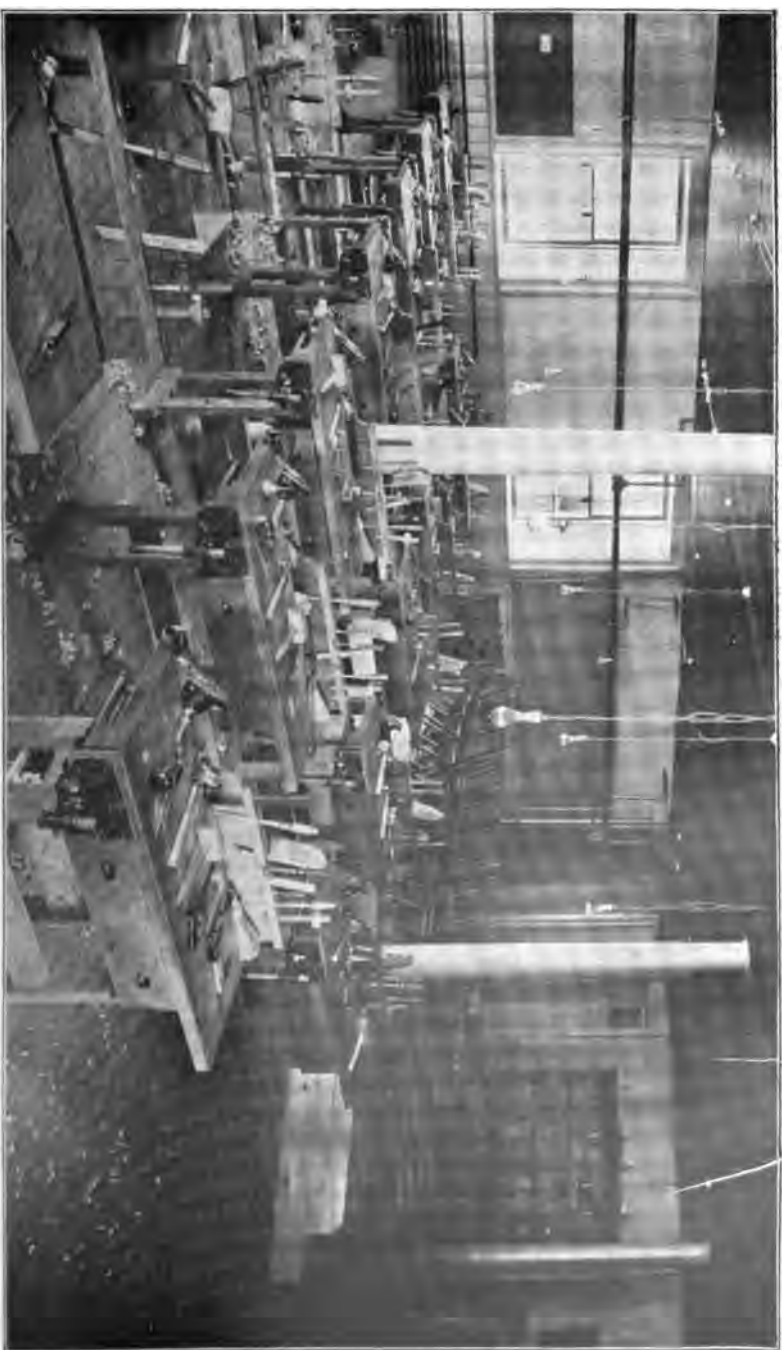
Hall of Liberal Arts—State University of Iowa, Iowa City.







High School Building, Mason City. Cost of building about \$70,000.



Manual Training—Iowa State Normal School, Cedar Falls.







**Manual training, Montezuma, Public Schools.**



**Domestic Science, Iowa State College, Ames.**



**Figure 1.**

**Underwood School Building.** Built and furnished at a cost of less than \$5,000.  
For floor plans see figures 10, 12 and 11.





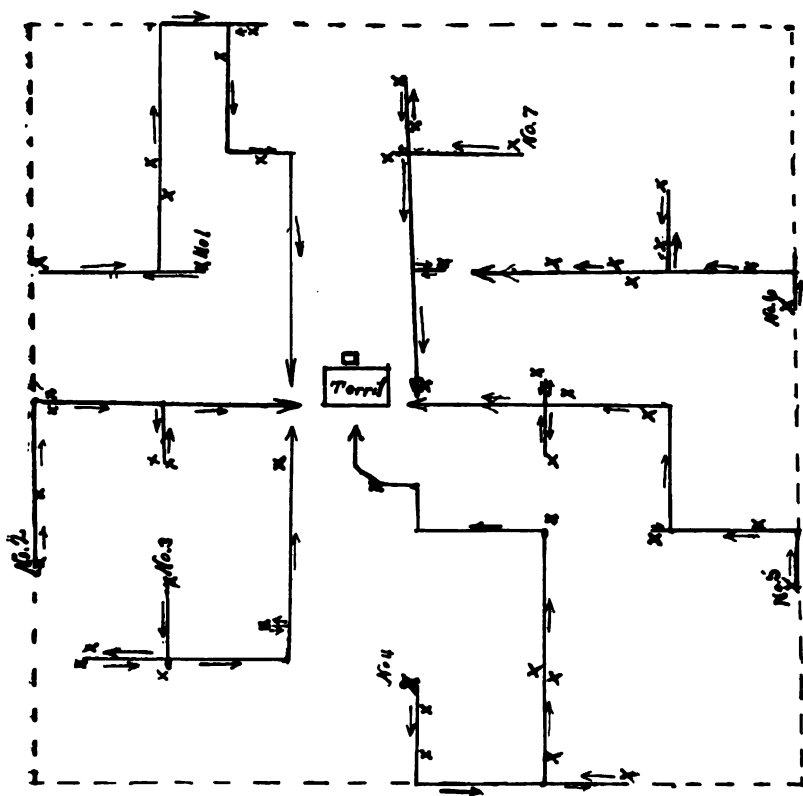
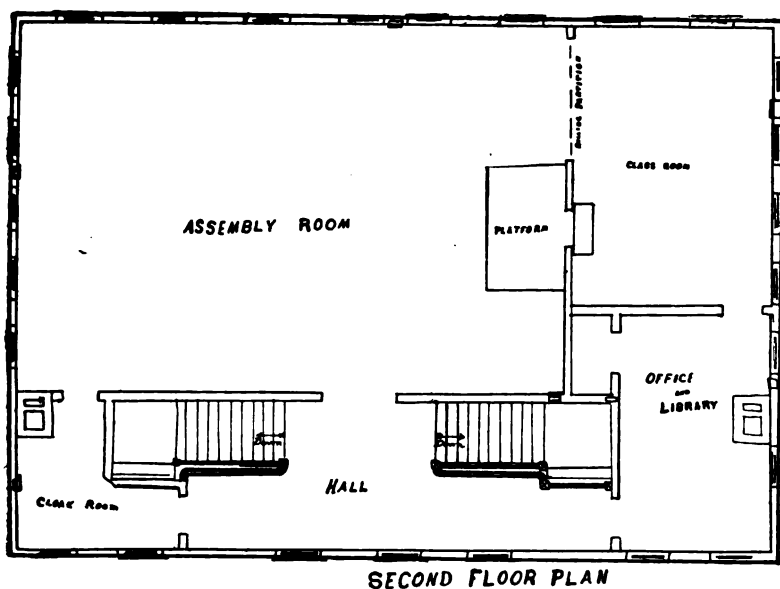
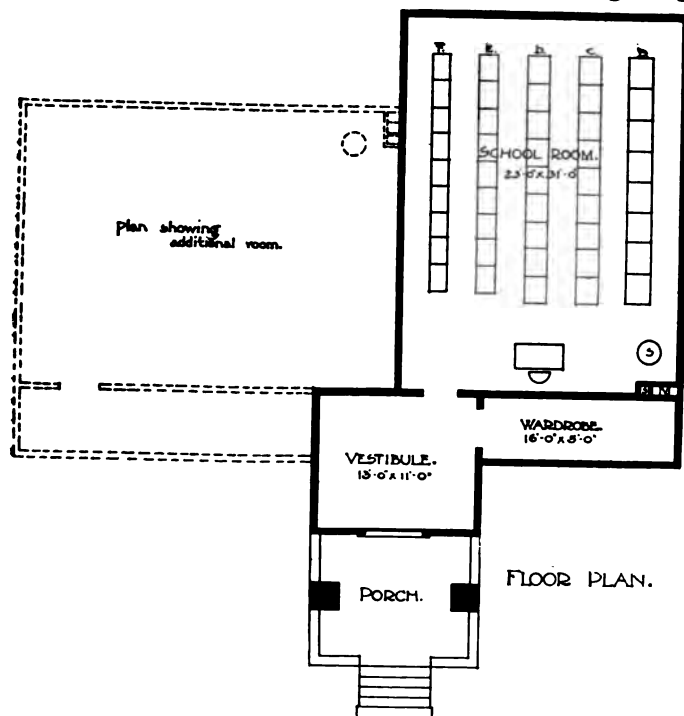


FIGURE 16.

Transportation Routes—Lloyd Township, Dickinson County.  
 Numbers indicate starting places for hacks.  
 X indicates homes, and  
 [ ] indicates the central school

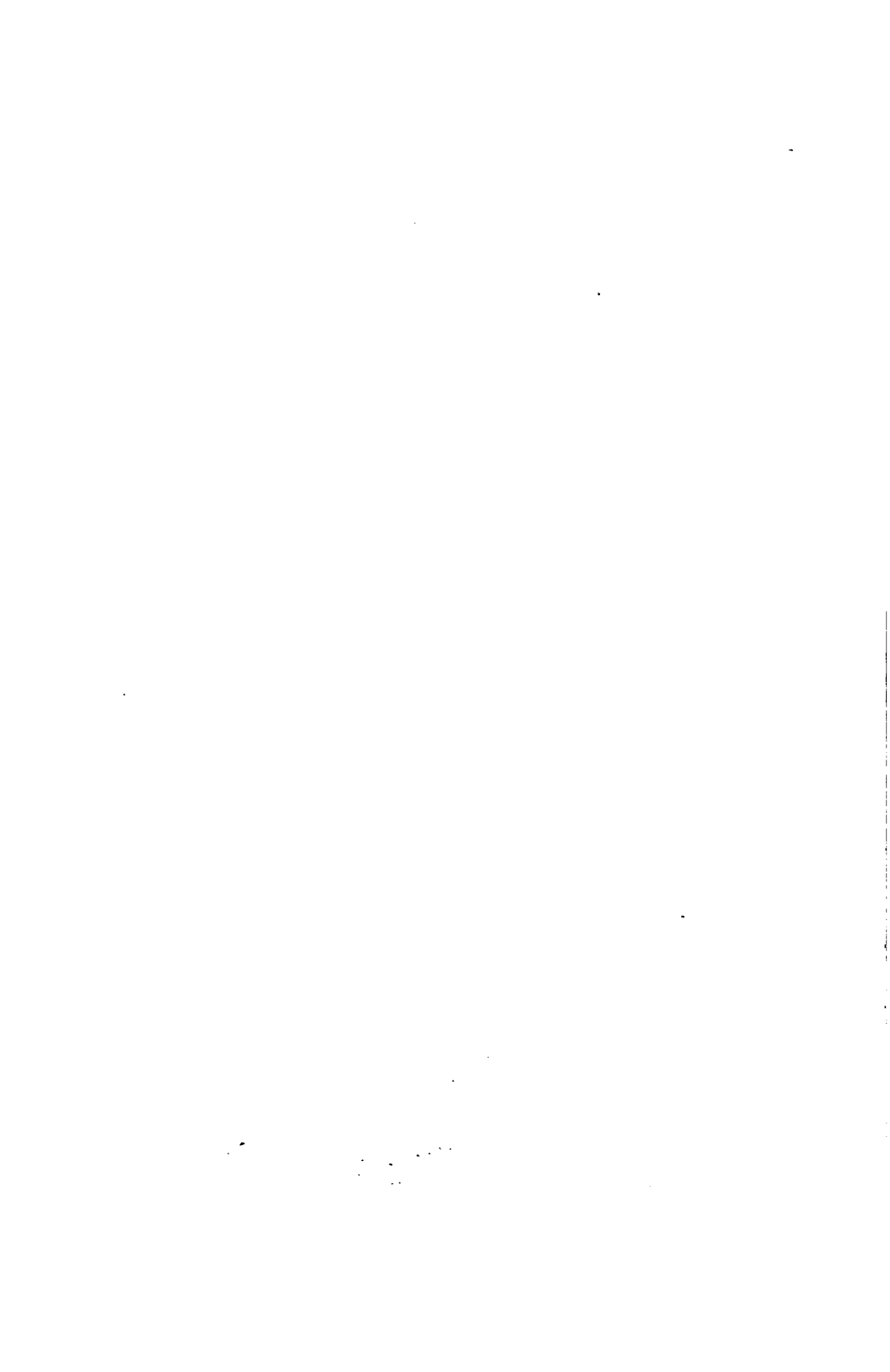


**FIGURE 14.**  
Underwood School Building—Second Floor Plan. For building see figure 1.



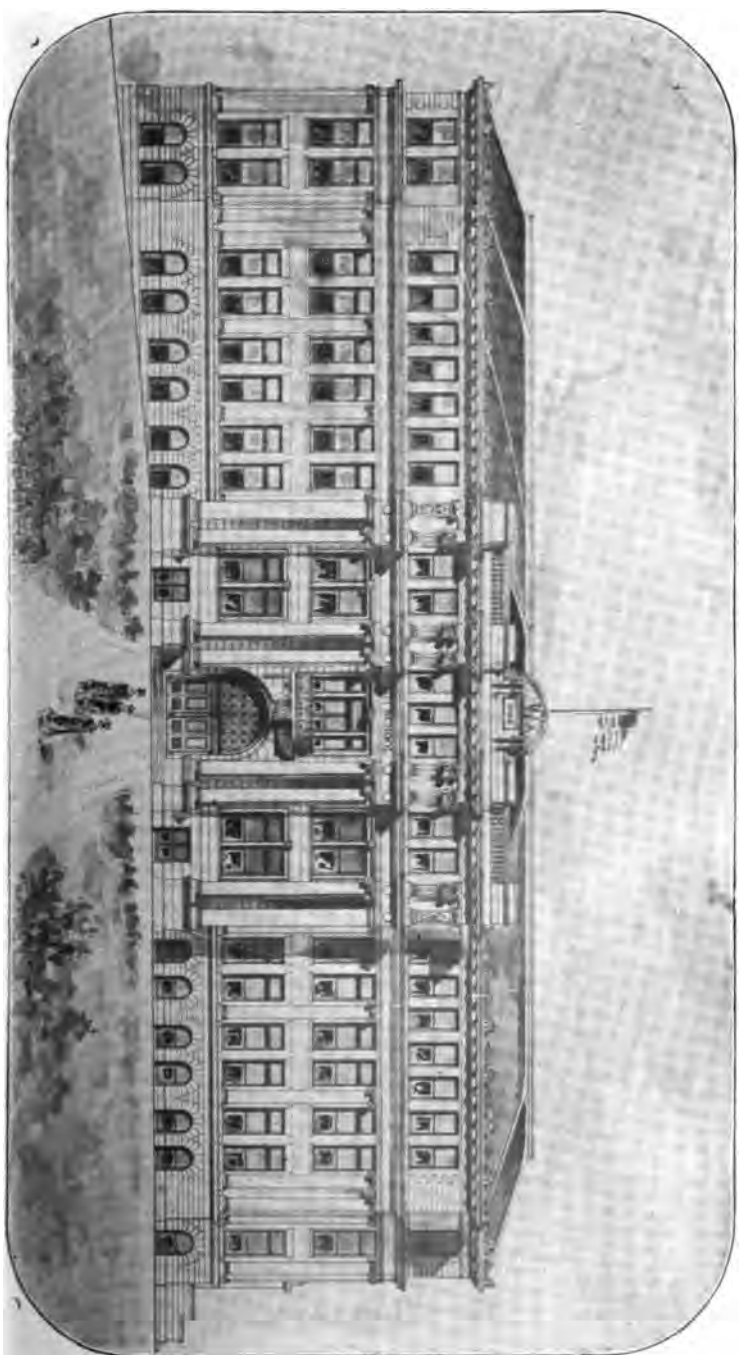
**FIGURE 15.**  
Floor plan of one room school building so constructed that a second room may be added. For building see figure 5





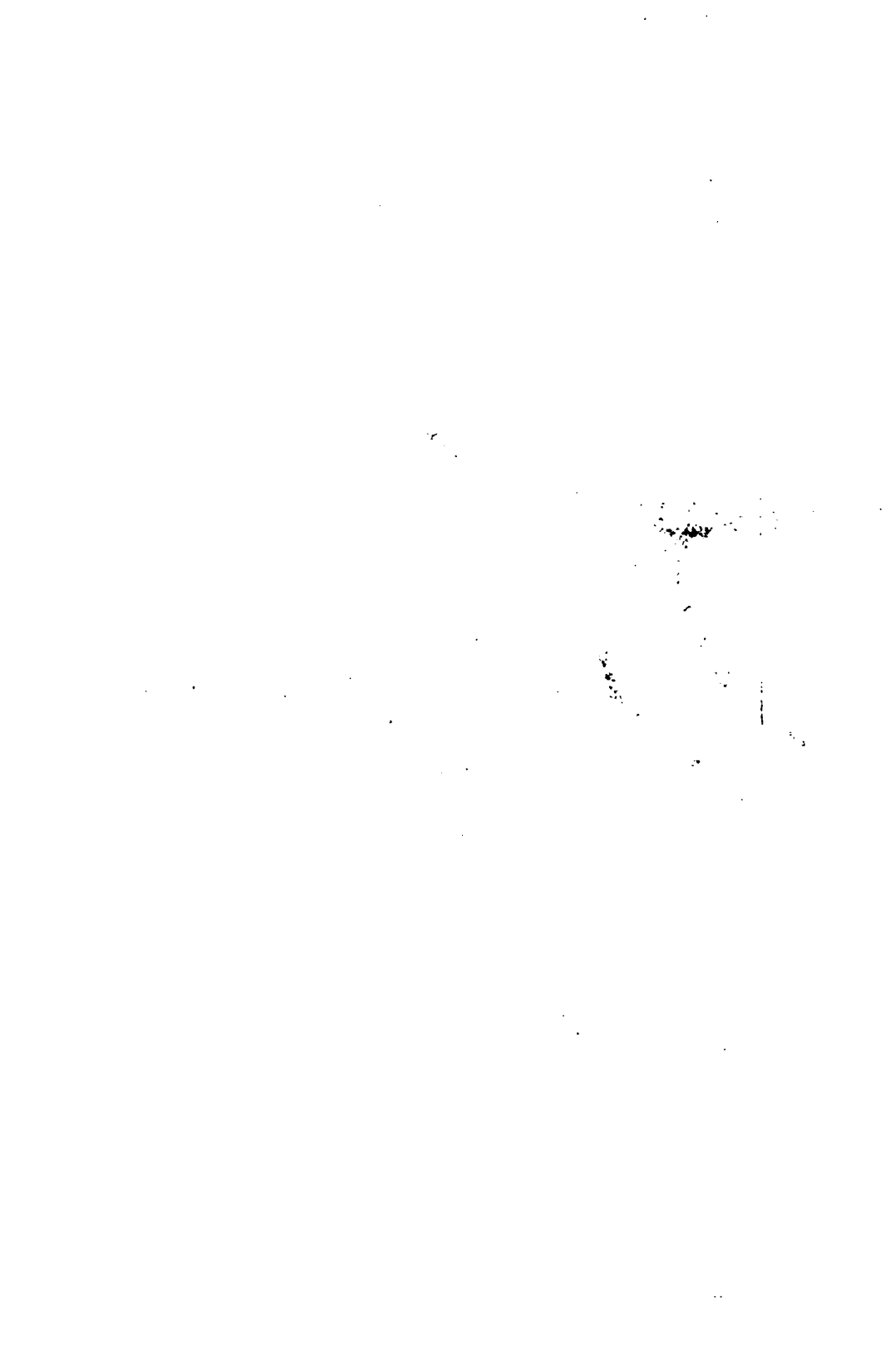


**Gymnasium-Iowa State Normal School, Cedar Falls.**



**High School Building, Davenport. Cost complete \$275,000.**







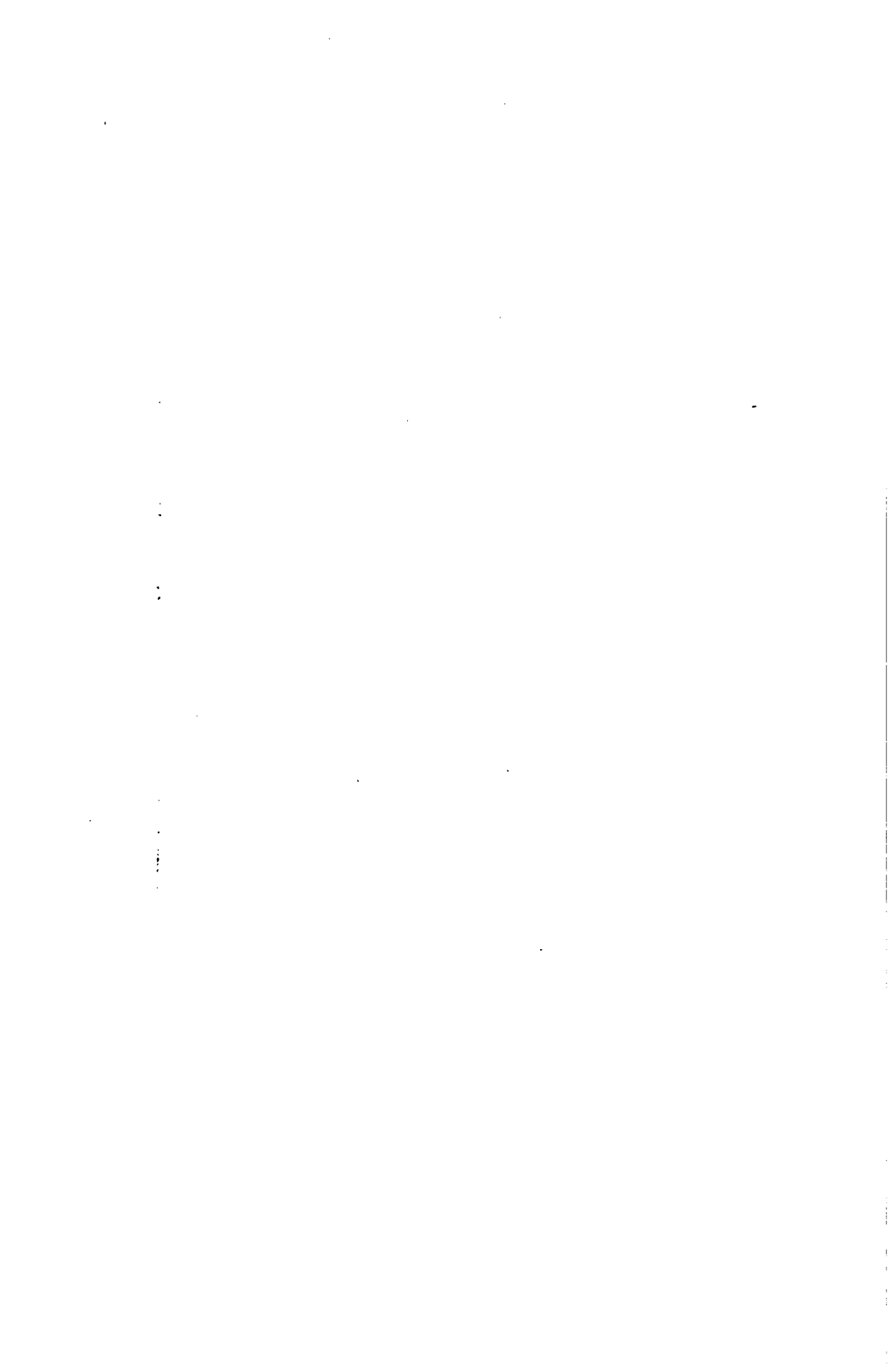
**New Central Building, Iowa State College, Ames.**



**FIGURE 6.**  
**Rural School House, District No. 5, Grinnell Township,**  
**Poweshiek County**



**FIGURE 7.**  
**District No. 3, Grinnell Township, Poweshiek County,—Corner**  
**of last day exhibit in the work room.**





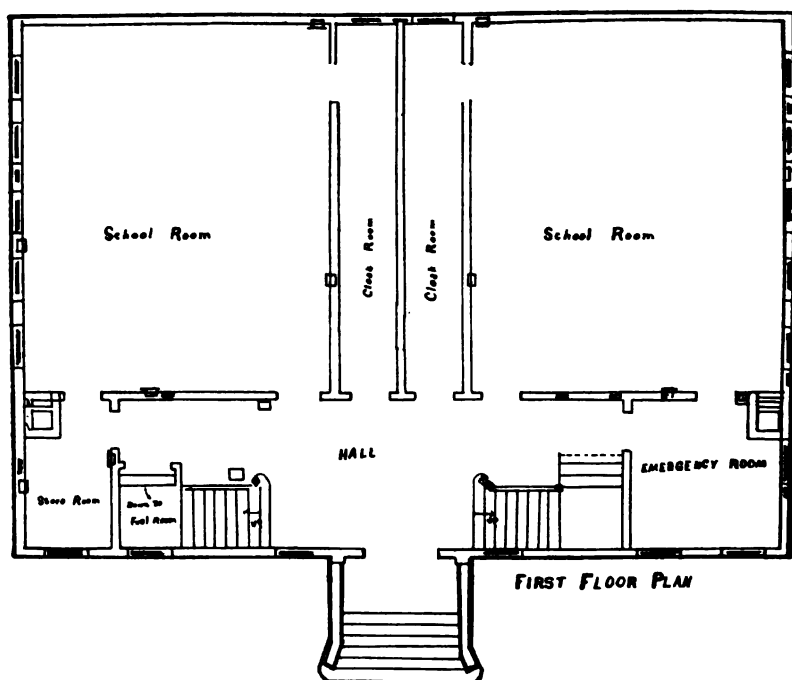


FIGURE 12.  
Underwood School Building—First Floor Plan.  
For building see figure 1.

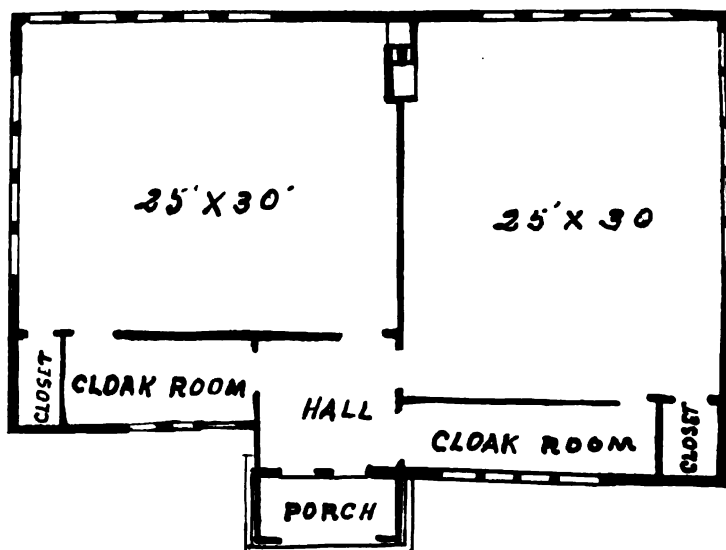


FIGURE 13.  
A Two-Room School House—Floor Plan.  
For building see figure 3.

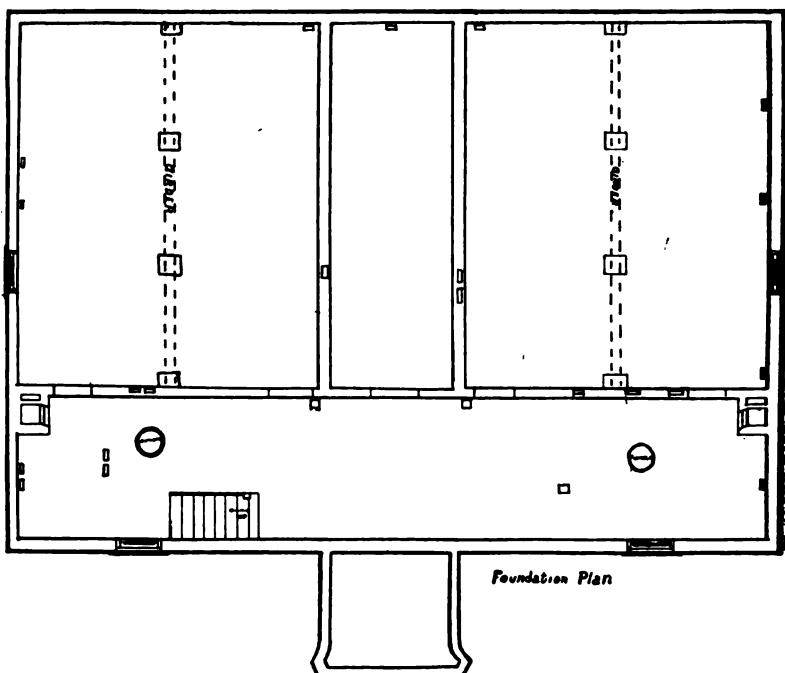


FIGURE 10  
Underwood School Building. - Foundation Plan. For building see figure 1.

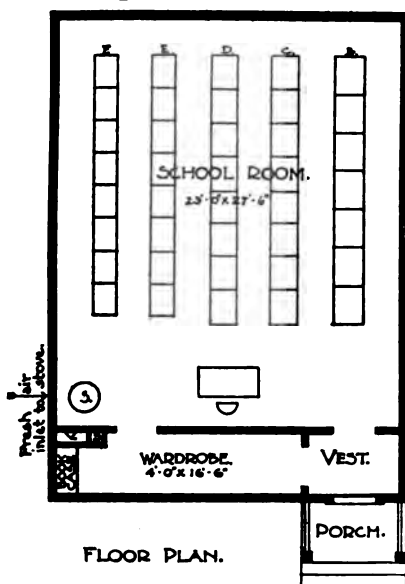
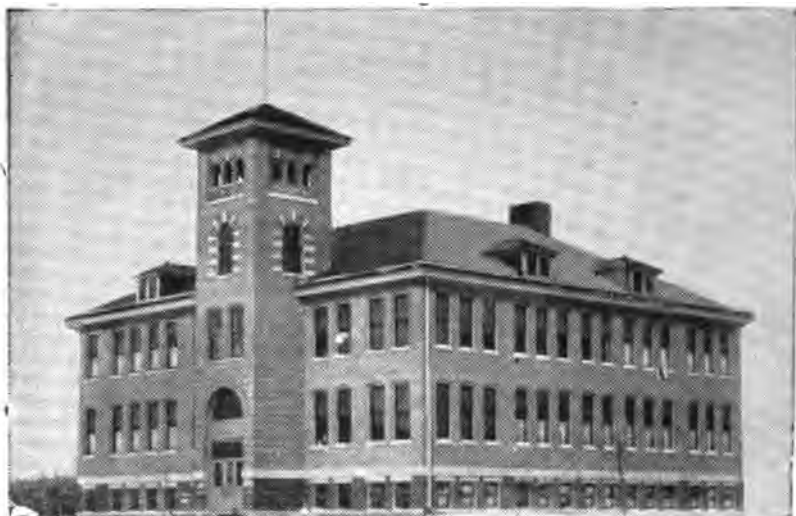


FIGURE 11.  
District No 3, Franklin Township, Monona County - Floor Plan. For cut of building see figure 4. The letters A, B, C, D, E and F refer to the size of the desks in the different rows and indicate the correct place for seating.







**FIGURE 2.**  
**Central School, Marathon, Buena Vista County.**



**FIGURE 3.**  
**A two-room school house; convenient and inexpensive.**  
**For floor plan, see figure 12.**



**FIGURE 4.**  
**Rural School House, District No 3, Franklin Township, Monona County.**  
 Cost \$800. For floor plan see figure 11.



**FIGURE 5.**  
**A one room school house so constructed that an additional room may be added when needed. For floor plan see figure 15.**



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# PART II.

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# STATISTICS.

1904.

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## SUPERINTENDENTS—STATE AND COUNTY—TERM, 1904-1906.†

JOHN F. BIGGS, SUPERINTENDENT PUBLIC INSTRUCTION,  
DES MOINES.

County.	Superintendent.	Terms Served	Postoffice.
Adair.....	Mrs. Ella C. Chantry.....	1½	Greenfield
Adams.....	A. B. Lewis.....	1	Corning
Allamakee.....	John E. Mills.....	1	Waukon
Appanoose.....	W. M. Speers.....	.....	Centerville
Audubon.....	Arthur Farquhar.....	2	Audubon
Benton.....	C. R. Lowe.....	1	Vinton
Black Hawk.....	Chas. Elliott.....	.....	Waterloo
Boone.....	Ralph R. Cobb.....	.....	Boone
Bremer.....	John T. Remick.....	.....	Waverly
Buchanan.....	M. J. Goodrich.....	1	Independence
Buena Vista.....	J. E. Durkee.....	4	Sioux Rapids
Butler.....	Ida F. Leydig.....	1	Allison
Calhoun.....	W. R. Sandy.....	2	Rockwell City
Carroll.....	W. J. Barloon.....	.....	Carroll
Cass.....	Mrs. Bertha A. Johnson.....	½	Atlantic
Cedar.....	George H. Kellogg.....	.....	Tipton
Cerro Gordo.....	P. O. Cole.....	2	Mason City
Cherokee.....	Agnes J. Robertson.....	4	Cherokee
Chickasaw.....	F. J. Conley.....	.....	New Hampton
Clarke.....	W. C. Davis.....	1	Osceola
Clay.....	* H. F. Fillmore.....	3	Spencer
Clayton.....	C. J. Adam.....	2	Elkader
Clinton.....	Geo. E. Farrell.....	1	Clinton
Crawford.....	F. L. Hoffman.....	.....	Denison
Dallas.....	R. F. Wood.....	1	Adel
Davis.....	Harvey O. Roland.....	.....	Bloomfield
Decatur.....	Eli Hutchinson.....	.....	Leon
Delaware.....	Frank D. Joseph.....	.....	Manchester
Des Moines.....	Howard A. Mathews.....	2	Burlington
Dickinson.....	W. T. Davidson.....	1	Spirit Lake
Dubuque.....	P. J. Schroeder.....	1	Dubuque
Emmett.....	Maria Z. Pingrey.....	1	Esterville
Fayette.....	Henry L. Adams.....	2	West Union
Floyd.....	Frederick Schaub.....	1	Charles City
Franklin.....	Samuel E. Campbell.....	.....	Hampton
Fremont.....	Mattie Lee A. Lair.....	1	Sidney
Greene.....	A. J. Oblinger.....	.....	Jefferson
Grundy.....	J. D. Adams.....	.....	Grundy Center
Guthrie.....	M. P. Kenworthy.....	.....	Guthrie Center
Hamilton.....	L. N. Gerber.....	2	Webster City
Hancock.....	A. M. Deyoe.....	1	Garner
Hardin.....	Mrs. Ella B. Chassell.....	1	Eldora
Harrison.....	D. E. Brainard.....	1	Logan
Henry.....	* Annie E. Packer.....	3	Mt. Pleasant
Howard.....	Helen L. Chapin.....	.....	Cresco
Humboldt.....	* Clarence Messer.....	4	Humboldt
Ida.....	J. C. Hagler.....	5	Ida Grove
Iowa.....	Howard T. Ports.....	1	Marengo

\* Was superintendent at a former time.

† Term extended to January 1, 1907 by the biennial amendment.

## SUPERINTENDENTS—STATE AND COUNTY TERM, 1904-1906—CONTINUED.

County.	Superintendent.	Terms Served.	Postoffice.
Jackson .....	C. C. Dubley .....	2	Maquoketo
Jasper .....	John E. Roberts .....	.....	Newton
Jefferson .....	Anna White .....	2	Fairfield
Johnson .....	L. H. Langenberg .....	1	Iowa City
Jones .....	Clifford B. Paul .....	2	Anamosa
Keokuk .....	C. E. Miller .....	1	Sigourney
Kossuth .....	C. H. Belknap .....	.....	Algona
Lee .....	E. C. Lynn .....	.....	Donnellson
Linn .....	J. E. Vance .....	1	Marion
Louisa .....	C. R. Wallace .....	1	Wapello
Lucas .....	Laura Fitch .....	1	Chariton
Lyon .....	*A. W. Grisell .....	4	Rock Rapids
Madison .....	*T. H. Stone .....	2	Winterset
Mahaska .....	Jas. P. Dodds .....	2	Oskaloosa
Marion .....	W. H. Lucas .....	1	Knoxville
Marshall .....	Mary E. Hostetler .....	1	Marshalltown
Mills .....	*W. M. Moore .....	3	Glenwood
Mitchell .....	*Jay A. Lapham .....	3½	Osage
Monona .....	F. E. Lark .....	4	Onawa
Monroe .....	R. B. Spencer .....	1	Albia
Montgomery .....	Mabel G. Hanna .....	1	Red Oak
Muscatine .....	F. M. Witter .....	1	Muscatine
O'Brien .....	Nellie Jones .....	1	Primghar
Osceola .....	J. P. McKinley .....	1	Sibley
Page .....	Geo. H. Colbert .....	1	Clarinda
Palo Alto .....	Anna E. Odland .....	.....	Emmetsburg
Plymouth .....	I. C. Hise .....	3	LeMars
Pocahontas .....	U. S. Vance .....	2	Laurens
Polk .....	Z. C. Thornburg .....	1	Des Moines
Pottawattamie .....	O. J. McManus .....	2	Council Bluffs
Poweshiek .....	P. A. McMillen .....	.....	Grinnell
Ringgold .....	Mrs. L. L. Richardson .....	.....	Mt. Ayr
Sac .....	H. C. Coe .....	.....	Sac City
Scott .....	J. H. Jacobs .....	.....	Davenport
Shelby .....	Geo. A. Luxford .....	1	Harlan
Sioux .....	W. E. Chase .....	1	Orange City
Story .....	Ira C. Welty .....	.....	Nevada
Tama .....	D. E. Brown .....	1	Toledo
Taylor .....	H. S. Ash .....	1	Bedford
Union .....	Frank M. Abbott .....	1	Creston
Van Buren .....	A. L. Heminger .....	.....	Keosauqua
Wapello .....	Emma Nye .....	.....	Ottumwa
Warren .....	J. W. Radebaugh .....	.....	Indianola
Washington .....	Cora Porter .....	.....	Washington
Wayne .....	Maud Elmore .....	1	Corydon
Webster .....	Alfred L. Brown .....	2	Ft. Dodge
Winnebago .....	*L. C. Brown .....	3	Forest City
Winneshiek .....	Ellis J. Hook .....	2	Decorah
Woodbury .....	*E. A. Brown .....	4	Sioux City
Worth .....	O. E. Gunderson .....	.....	Northwood
Wright .....	Agnus McDonald .....	2	Clarion

\* Was superintendent at former time.

† Term extended to January 1, 1907, by the biennial amendment.

# ABSTRACT [A]—REPORT OF SCHOOL

COUNTIES.	DISTRICTS.			SCHOOLS.			TEACHERS.			
	School townships.	Independent districts.	Number subdistricts.	Rooms in rural schools.	No. of schoolrooms in cities and towns.	Average duration in months.	Number Employed.		Av. Monthly Compensation.	
							Males.	Females.	Males.	Females.
Adair.....	15	15	127	137	28	8.2	35	306	40 05	33 97
Adams.....	9	33	77	104	34	8.1	45	208	37 83	33 20
Allamakee.....	9	70	58	126	30	7.1	85	222	38 36	28 30
Appanoose.....	13	35	98	118	76	7.2	66	222	41 55	30 15
Audubon.....	12	3	106	104	24	8.2	36	197	39 63	34 94
Benton.....	10	97	82	168	60	8.6	58	321	45 34	34 47
Black Hawk.....	10	63	78	140	106	8.3	25	374	81 08	46 33
Boone.....	11	57	98	145	79	8.0	50	316	41 06	34 46
Bremer.....	6	62	43	97	42	7.5	14	187	55 79	29 47
Buchanan.....	9	63	77	132	61	8.3	28	282	47 06	32 39
Buena Vista.....	15	12	120	128	48	8.0	28	259	60 99	32 10
Butler.....	11	47	96	135	48	8.7	34	270	50 72	33 04
Calhoun.....	16	9	134	133	51	8.3	32	295	50 63	35 97
Carroll.....	13	59	114	134	53	7.9	43	234	49 98	33 73
Cass.....	15	17	130	140	57	8.4	26	317	54 54	36 24
Cedar.....	12	44	100	133	46	8.0	32	252	52 95	35 95
Cerro Gordo.....	12	23	103	134	72	8.1	29	313	40 30	33 11
Cherokee.....	15	15	126	132	42	8.3	33	294	49 97	37 84
Chickasaw.....	5	62	53	109	33	7.9	20	227	45 10	28 98
Clarke.....	9	28	78	102	26	7.7	37	189	34 73	30 70
Clay.....	16	5	123	123	30	8.5	29	225	42 11	35 59
Clayton.....	17	37	145	167	62	8.0	46	275	46 65	31 13
Clinton.....	17	36	183	157	140	8.9	32	384	65 56	34 50
Crawford.....	20	8	170	166	53	8.5	34	326	49 92	34 35
Dallas.....	13	34	114	138	78	8.4	36	323	55 70	34 73
Davis.....	6	69	34	96	29	6.6	50	121	34 65	29 00
Decatur.....	9	54	67	111	48	7.3	38	206	40 04	28 92
Delaware.....	14	25	113	130	43	8.4	14	244	44 42	30 99
Des Moines.....	5	61	25	84	134	8.0	32	226	66 62	42 83
Dickinson.....	11	8	63	72	26	7.9	19	126	55 13	34 79
Dubuque.....	10	52	67	124	129	8.7	24	259	100 72	37 14
Emmet.....	10	2	71	74	33	8.2	10	129	53 90	37 72
Fayette.....	12	82	103	175	73	8.0	41	390	42 44	30 96
Floyd.....	11	16	103	113	60	8.2	33	243	58 89	52 33
Franklin.....	12	36	102	137	81	8.0	37	244	41 95	52 76
Fremont.....	11	19	103	117	55	8.9	36	230	52 17	36 34
Greene.....	14	19	129	136	38	8.0	37	305	43 03	35 80
Grundy.....	9	50	75	119	31	8.2	35	203	39 48	34 66
Guthrie.....	15	15	134	142	57	8.5	49	318	46 30	34 39
Hamilton.....	14	33	107	133	51	8.2	52	268	46 65	36 49
Hancock.....	16	8	115	122	59	8.1	35	200	48 12	36 69
Hardin.....	8	65	76	129	77	8.0	34	292	44 65	36 11
Harrison.....	16	33	118	145	69	8.6	43	303	51 51	35 40
Henry.....	4	74	32	97	43	7.8	32	225	36 20	30 32
Howard.....	11	11	91	98	31	8.1	16	206	50 67	32 32
Humboldt.....	10	19	85	103	41	8.6	19	194	52 86	35 65
Ida.....	12	5	98	99	24	8.4	28	165	47 91	37 09
Iowa.....	10	65	76	135	44	8.0	46	248	40 14	36 23
Jackson.....	14	45	105	138	62	8.2	20	240	50 82	31 24
Jasper.....	17	30	156	177	71	7.9	55	399	41 72	34 43

## COUNTY SUPERINTENDENTS, 1904.

## STATISTICS.

PUPILS.										SCHOOLHOUSES.			GENERAL.			
Between Ages of 5 and 21 Yrs.		Ages of 7 to 14 Years Inclusive.		Persons 7 to 14 Yrs. not Attend- ing School.		Enrolled in public schools.	Total average attend- ance.	Average tuition per month per pupil.	Number of school- houses.	Value of schoolhouses.	Value of apparatus.	Number of volumes in the libraries.	No. of trees in thrifty condition on the schoolhouse sites.	Rooms in which effects of stimulants and narcotics are taught.		
Males.	Females.	Males.	Females.	Males.	Females.											
2598	2466	1433	1401	55	49	4230	8688	\$ 2 24	146	\$ 124388	\$ 6194	4083	8089	164		
2032	2064	1108	1163	22	11	3555	2308	2 18	112	96556	5021	2204	2055	135		
3163	2976	1656	1538	26	24	4304	2929	1 91	132	123810	7801	5242	989	156		
4631	4469	2303	2292	105	61	7244	5088	1 60	138	19270	4966	4045	1844	194		
2433	2322	1337	1230	17	7	3822	2354	2 12	111	113775	5511	2985	899	128		
3911	3790	2018	2000	52	46	5887	4279	2 05	187	200960	9902	10763	3323	221		
5487	5405	2817	2747	48	35	7638	5162	2 30	154	438905	10998	8659	2387	243		
4456	4340	2247	2232	26	22	6812	4773	1 88	157	208000	9344	11082	2729	199		
2548	2517	1388	1398	36	35	3808	2234	2 17	112	122175	6958	7601	1905	136		
3065	2916	1686	1613	12	1	4694	3777	2 18	150	181740	10187	6498	1562	193		
2836	2691	1480	1371	24	9	4495	2943	2 34	189	170695	8831	15168	1892	175		
2910	2747	1674	1534	134	70	4849	3237	2 20	148	147340	9808	6829	2983	148		
2965	2885	1618	1603	8	4	5087	3431	2 21	149	173040	8485	12332	1820	153		
3763	3626	1868	1859	57	52	4755	3387	2 31	146	160425	9120	4139	1887	166		
3195	3205	1721	1721	17	7	5627	3809	2 18	153	163525	8135	7937	3594	179		
3041	2988	1712	1722	15	8	4626	3186	2 42	145	182665	12495	7557	3392	178		
3338	3231	1653	1544	17	13	5143	3612	2 32	148	185845	10199	7186	2344	193		
2691	2612	1425	1370	65	41	4477	2905	2 53	144	185075	9345	17275	2405	146		
2735	2778	1452	1451	18	13	3836	2595	2 22	119	106861	5398	4678	2108	148		
1964	1853	1050	1032	19	13	3245	2209	2 06	108	77002	3202	3205	2190	128		
2225	2063	1188	1144	11	8	3752	2391	2 47	182	117258	7534	7807	1155	153		
4478	4427	2390	2450	45	21	6325	4226	1 95	181	206425	9189	8078	1863	229		
7172	7362	3903	3765	67	54	9274	6902	2 03	186	473770	15394	6854	3567	276		
3908	3797	2116	2145	8	7	5633	3563	2 26	179	202700	14560	5692	3455	215		
3730	3571	2237	2220	10	8	6521	4431	2 06	158	176465	7534	6515	3452	211		
2448	2316	1315	1261	28	32	3651	2291	1 55	104	96985	3331	2296	1638	123		
2924	2876	1552	1653	17	12	5223	3436	1 72	124	118975	5018	3159	2861	136		
3304	3011	1729	1572	40	30	4365	2913	2 02	145	129270	6447	5889	1588	168		
5621	5728	2781	2929	30	17	7282	5356	2 26	99	319290	11961	2915	2099	218		
1447	1364	792	831	43	29	2702	1563	2 56	79	80790	4628	4333	1383	98		
10142	10565	4624	4718	56	40	7960	5738	2 27	151	505725	11734	7043	1897	240		
1776	1760	1076	1025	25	16	2735	1903	2 36	86	92508	3946	6789	1481	106		
4785	4702	2379	2333	67	54	7188	4832	1 84	190	220660	8978	12027	3686	237		
2487	2658	1277	1348	19	17	4028	2794	2 39	124	221678	8358	7954	1596	171		
2446	2343	1258	1170	31	29	3888	2493	2 52	144	117950	5189	5321	2213	165		
2857	2725	1648	1547	28	20	4413	3230	2 05	128	166061	5713	6529	2570	157		
2685	2663	1434	1479	12	98	4592	3081	2 17	145	133690	6487	4291	3540	174		
2299	2290	1277	1240	30	25	3658	2367	2 46	128	118963	7823	4116	2108	139		
3129	3125	1607	1700	13	7	5206	3642	2 08	154	170890	7718	4646	1578	196		
3232	3233	1661	1678	9	11	5178	3440	1 83	146	172800	11193	4442	1314	179		
2482	2280	1401	1246	18	16	3879	2529	2 52	136	137875	7530	5453	2398	161		
3768	3694	2124	2143	36	49	5968	4039	2 27	149	195920	9626	6673	3394	197		
4063	4109	2153	2256	75	81	6582	4777	1 94	160	108940	7932	4172	3076	213		
2647	2652	1351	1326	33	15	4425	2879	2 01	109	139197	8254	5729	2762	133		
2363	2339	1276	1380	17	11	3455	2129	2 41	106	88735	4568	4021	1807	126		
2148	2063	1180	1162	13	8	3876	2340	2 13	112	96535	5710	7533	2047	139		
2112	1976	1214	1143	17	10	3254	2248	2 50	106	123240	9194	7381	3204	106		
3297	2938	1711	1643	21	12	4863	3417	2 07	142	162075	6326	9830	3422	173		
3872	3889	2169	2286	68	64	5670	3959	1 83	154	182650	9965	8910	2332	193		
4274	4022	2214	2142	42	40	6804	4596	2 13	191	229675	9022	5271	4213	246		

ABSTRACT [A] REPORT OF  
SCHOOL

COUNTIES.	DISTRICTS.			SCHOOLS.			TEACHERS.			
	School townships.	Independent districts.	Number sub-districts.	Rooms in rural schools.	No. of school rooms in cities and towns.	Average duration in months.	Number Employed.		Av. Monthly Compensation.	
							Males.	Females.	Males.	Females.
Jefferson.....	9	88	69	92	33	7.7	29	194	\$ 40 56	\$ 81 72
Johnson.....	16	48	114	155	76	8.4	58	320	44 18	82 04
Jones.....	9	62	70	180	52	8.7	24	245	51 77	34 44
Keokuk.....	2	115	24	125	77	7.6	61	236	58 04	33 35
Kossuth.....	28	10	21	211	56	8.1	45	361	42 98	34 47
Lee.....	7	64	47	101	104	6.6	27	239	58 18	35 65
Linn.....	11	74	105	167	238	8.0	58	512	51 25	39 30
Louis.....	9	28	59	78	38	8.3	32	176	44 01	34 04
Lucas.....	4	60	83	90	37	7.0	28	178	40 53	32 28
Lyon.....	12	19	84	127	41	8.2	41	204	42 75	36 49
Madison.....	12	27	118	134	40	8.1	44	234	37 62	31 89
Mahaska.....	9	74	68	135	91	8.1	51	318	46 58	37 05
Marion.....	4	118	22	135	66	7.2	41	247	42 19	32 82
Marshall.....	12	58	90	126	118	8.4	89	329	52 63	41 33
Mills.....	4	68	19	81	51	8.5	27	153	57 90	39 34
Mitchell.....	8	47	51	89	10	7.3	22	175	55 35	31 29
Monona.....	16	19	120	142	50	8.3	23	298	58 61	33 92
Monroe.....	7	40	60	92	52	7.3	29	133	44 00	32 18
Montgomery.....	10	23	85	103	53	7.5	25	229	58 45	35 70
Muscatine.....	11	27	68	87	99	8.3	22	245	67 97	38 85
O'Brien.....	15	7	123	133	55	8.5	48	244	52 81	37 43
Oceola.....	11	8	92	90	23	8.1	22	163	44 67	36 41
Page.....	11	47	88	118	74	8.3	31	265	50 00	36 26
Palo Alto.....	16	7	124	122	36	8.7	17	213	52 14	34 99
Plymouth.....	23	11	157	170	52	8.5	29	296	48 00	35 00
Pocahontas.....	15	15	117	130	43	7.8	32	245	42 38	35 86
Polk.....	13	58	90	113	865	8.4	63	575	72 55	52 72
Pottawattamie.....	24	26	214	226	186	8.6	49	557	60 06	41 67
Poweshiek.....	14	24	116	133	58	8.1	38	300	53 21	36 22
Ringgold.....	12	39	95	123	42	7.4	46	238	38 83	31 84
Sac.....	16	9	132	130	49	8.5	35	250	51 60	34 41
Scott.....	13	28	73	103	194	9.1	57	330	50 14	43 74
Shelby.....	16	10	132	132	49	8.6	54	240	41 32	36 94
Sioux.....	21	18	161	170	67	8.8	52	264	44 31	36 09
Story.....	14	31	115	133	50	7.8	61	297	44 44	41 35
Tama.....	12	32	95	167	63	8.0	41	356	48 69	33 17
Taylor.....	13	28	99	118	53	7.8	35	254	43 98	34 33
Union.....	10	24	91	108	63	8.5	26	149	54 07	35 75
Van Buren.....	8	50	65	109	40	7.5	43	187	40 78	29 15
Wapello.....	8	48	55	96	117	8.1	23	234	57 30	38 53
Warren.....	7	38	52	130	47	7.9	32	231	46 43	35 09
Washington.....	6	35	50	123	43	7.8	33	261	50 43	38 50
Wayne.....	13	34	91	117	43	7.3	54	215	39 19	29 33
Webster.....	13	44	137	174	33	8.1	31	331	50 10	36 73
Winnabago.....	10	12	76	85	37	7.2	23	140	44 96	33 30
Winnebago.....	14	45	98	137	43	7.0	36	238	45 27	31 60
Woodbury.....	17	4	135	178	226	8.5	55	494	62 00	43 54
Worth.....	12	6	87	88	21	7.4	23	144	37 54	32 17
Wright.....	15	16	118	123	61	8.2	44	273	45 26	35 53
Total.....	1189	3741	9221	12492	6453	8 0	3006	26019	\$ 43 24	\$ 35 51

## COUNTY SUPERINTENDENTS FOR 1904—CONTINUED.

## STATISTICS.

PUPILS.										SCHOOLHOUSES.			GENERAL.			
Between Ages of 5 and 21 Yrs.		Ages of 7 to 14 Years Inclusive.		Persons 7 to 14 Yrs. not Attending School.		Enrolled in public schools.	Total average attend- ance.	Average tuition per month per pupil.	Number of school- houses.	Value of schoolhouses.	Value of apparatus.	Number of volumes in the libraries.	No. of trees in thrifty condition on the schoolhouse site.	Rooms in which effects of stimulants and narcotics are taught.		
Males.	Females.	Males.	Females.	Males.	Females.											
2588	2547	1296	1314	29	19	3975	2714	\$ 1 73	100	\$ 96590	\$ 3163	3295	1404	125		
3816	3075	2103	1940	35	36	5885	4004	2 11	170	249005	9801	10322	4667	230		
8399	8034	1862	1703	72	44	5359	3489	1 90	139	174075	7337	9866	2265	182		
3651	3559	1988	1944	48	49	6058	4123	1 98	147	192875	8964	7691	4391	201		
3864	3719	2295	2348	67	57	6028	3789	2 64	228	207705	12980	6067	3186	293		
5544	5592	2885	2851	48	23	6424	4668	2 51	125	400348	6257	6258	2660	202		
5556	5856	4963	4886	36	19	12813	9494	2 19	203	750975	18121	14678	3815	345		
2687	1974	1171	1079	9	14	3254	2251	2 08	90	110381	3096	5463	1629	116		
2681	2550	1316	1390	6	3	4217	2902	1 88	99	153430	5828	8402	2456	127		
2519	2382	1480	1466	74	55	3951	2515	2 75	136	123440	5340	6005	2420	164		
2771	2584	1565	1570	4	1	4672	3152	1 96	143	138085	5812	3455	2489	172		
5006	4791	2690	2613	91	110	7817	5208	1 88	161	282701	8736	6180	2910	226		
4035	3820	2067	2011	75	56	6394	4139	1 89	153	308830	6298	5739	2421	199		
4488	4286	2207	2145	19	14	6875	4883	2 16	156	639690	6621	7789	2890	227		
2820	2797	1354	1347	15	14	4231	2654	2 17	92	190115	7175	10292	2486	123		
2427	2432	1344	1353	22	7	3404	2382	2 40	106	118857	5438	10468	2316	139		
3255	3127	1722	1711	50	33	4686	3039	2 39	153	179530	6345	3698	2714	192		
3849	3636	1737	1646	104	103	5482	3712	1 46	105	122065	4132	2731	841	139		
2730	2588	1407	1298	18	16	4508	3224	2 39	113	195850	5776	4661	3085	155		
4515	4286	2272	2202	7	10	6114	4463	2 13	105	248306	5189	4324	2019	188		
3003	3022	1754	1748	24	14	5046	3530	2 26	141	193685	15716	17316	3370	188		
1709	1575	1014	921	10	11	2672	1638	2 66	94	106305	4010	9635	1516	108		
3600	3504	1955	1888	18	14	6093	4100	2 00	139	199543	8183	5340	5133	192		
2490	2388	1387	1296	10	10	3780	2373	2 42	133	112230	10916	18100	2598	156		
4092	3954	2388	2405	109	96	5586	3469	2 45	181	163600	11300	9163	2505	222		
2926	2483	1452	1435	18	8	4582	2893	2 41	144	134125	8402	11665	6159	172		
14711	15352	6466	6330	104	41	19684	13917	2 52	193	1582105	39888	13900	4396	443		
8968	8645	4692	4793	78	71	12917	8809	2 33	257	539819	36321	9629	5102	416		
3004	3009	1679	1700	9	7	5072	3993	2 24	148	273300	8908	10390	3623	173		
2410	2420	1283	1266	28	24	4217	2878	2 16	134	109675	7442	8932	1832	164		
2863	2909	1573	1632	26	21	4638	3360	2 07	145	180325	7130	8179	2004	175		
8911	8409	4730	4475	11	6	10893	8102	2 24	127	735643	12825	11957	4103	197		
3125	2973	1787	1704	8	8	4530	3020	2 40	146	130800	8865	10878	4105	161		
4594	4359	2533	2499	92	64	6366	4250	2 27	188	205655	8399	9422	4051	237		
3948	3801	2133	2097	.....	.....	6497	4448	2 12	151	186195	1434	7118	3087	208		
3760	3592	2057	2021	7	9	5805	4235	2 23	183	245810	11303	7321	3811	228		
2839	2778	1497	1484	19	27	4993	3478	2 02	131	115235	4336	3320	2288	170		
2904	2901	1441	1526	18	13	4638	3124	2 17	122	219795	5031	5082	1754	157		
2632	2389	1287	1196	10	12	4146	2895	1 74	116	127540	4395	3204	2083	150		
5326	5253	2835	2925	87	83	8148	6080	1 97	114	419750	6765	8252	2419	201		
3253	3296	1721	1733	10	7	5668	3732	1 76	144	167440	6174	6069	2812	170		
3232	3212	1707	1700	21	21	5183	3486	2 14	138	163578	5815	11778	2297	167		
2890	2802	1458	1436	12	10	5030	3430	1 74	130	132855	6104	4320	1234	165		
4606	4862	2617	2713	18	16	7264	4797	2 12	189	304105	6827	15785	3409	244		
2252	2021	1218	1149	15	19	3370	2196	2 22	94	98390	3052	4218	1272	118		
3828	3782	2023	2003	11	16	5061	3002	2 32	149	164782	6419	7172	1339	163		
10380	10340	7401	7058	39	36	13809	9929	2 12	217	928865	20162	8946	4646	403		
19890	1781	1055	1016	11	4	2774	1870	2 00	97	77695	4180	3548	1022	109		
3259	2914	1737	1601	7	3	4997	3553	2 22	141	157120	8239	11153	2315	189		
55829	357543	194987	192391	3409	2654	545940	373023	\$ 2 18	13956	\$ 21832042	\$ 834456	714492	257045	18220		

## ABSTRACT [B] REPORTS FOR 1904.

## SCHOOL FINANCES.

COUNTIES.	TEACHERS' FUND.									
	DEBIT.					CREDIT.				
	On hand at last report.	Received from district tax.	Received from semi-annual apportionment.	Received from other sources.	Total debit or credit.	Paid teachers since last report.	Paid for library books.	Paid for other purposes.	On hand.	
Adair.....	\$ 28413 63	\$ 38913 83	\$ 3707 43	\$ 1843 86	\$ 39875 74	\$ 49460 87	\$ 141 76	\$ 175 68	\$ 19327 73	
Adams.....	15995 04	39128 53	4898 15	1168 60	61175 23	40809 29	38 69	218 14	30109 20	
Allamakee.....	18149 64	32985 21	6963 41	1087 01	53935 27	39816 31	108 67	371 26	17994 06	
Appanoose.....	29394 88	56546 02	8141 18	947 87	92929 40	58155 46	127 00	1745 08	32001 98	
Audubon.....	19333 19	34813 00	5383 61	880 58	53615 36	40876 00	177 57	67 58	13694 20	
Benton.....	59537 56	61574 18	11160 50	1808 98	130681 10	75674 91	247 69	154 78	54503 73	
Black Hawk.....	57213 97	89254 94	14407 18	705 84	168590 43	98747 41	232 97	2316 49	57296 56	
Boone.....	88445 26	64235 96	7916 01	300 87	110897 80	71718 62	98 52	387 17	88996 40	
Bremer.....	21597 14	30026 69	5087 11	902 46	58463 40	36511 27	18 17	434 01	21504 96	
Buchanan.....	30779 85	50884 53	7820 34	1581 00	97096 32	61968 63	205 26	525 60	34906 88	
Buena Vista.....	31196 06	47266 02	6154 08	1237 53	58944 89	55074 59	188 91	296 95	30344 58	
Butler.....	38843 74	49146 06	7938 45	1826 14	97759 39	58292 65	231 15	207 44	38036 15	
Calhoun.....	27343 44	48014 60	5018 78	2378 15	88454 97	63103 67	208 75	377 43	19670 07	
Carroll.....	26930 70	54071 11	6451 00	7318 71	94740 52	61895 56	80 86	4390 59	27933 51	
Cass.....	35427 98	57037 85	3853 94	2437 91	103246 69	70575 13	150 89	59 08	32461 63	
Cedar.....	42436 01	48897 95	8064 00	2365 98	107758 92	61651 81	253 35	116 82	40731 94	
Cerro Gordo.....	37355 79	58041 72	12294 40	3861 60	111558 51	67955 18	174 29	648 46	43790 58	
Cherokee.....	34331 83	50654 63	9249 50	1067 80	103108 20	60963 24	190 08	236 17	40663 77	
Chickasaw.....	22730 86	34170 49	5534 51	1200 92	65986 78	40896 05	29 52	182 51	23236 90	
Clarke.....	16506 38	30171 05	5213 89	1190 78	58038 96	35194 94	123 25	737 62	16973 12	
Clay.....	24043 05	38397 18	3882 81	1893 58	73220 62	50224 35	118 18	296 69	22631 40	
Clayton.....	42098 20	55530 99	11147 11	2107 24	110693 54	69050 08	243 01	896 21	43906 24	
Clinton.....	52076 66	94400 32	14455 35	3714 75	164647 06	124794 09	345 70	788 05	83719 34	
Crawford.....	46890 44	57742 53	12365 53	814 77	117308 32	68638 36	84 62	2762 64	46337 20	
Dallas.....	26833 37	67910 56	3757 52	5423 73	111425 18	76892 34	307 66	1502 76	32723 42	
Davis.....	6557 96	20070 59	7778 08	512 46	35519 06	23404 87	115 96	3 7 34	11690 99	
Decatur.....	26013 79	37372 29	4870 84	1223 42	69979 84	43127 47	535 60	117 81	26198 46	
Delaware.....	33656 21	44610 85	7096 79	1235 79	85543 64	50081 41	262 10	173 52	35023 61	
Des Moines.....	23576 99	85188 08	10658 28	633 42	120851 77	98006 17	55 50	14 89	33375 21	
Dickinson.....	16338 47	27225 92	3965 46	402 67	47133 52	316 9 91	80 01	115 82	15237 28	
Dubuque.....	23303 80	38462 40	20385 67	710 41	132361 28	113242 90	118 56	189 06	13610 74	
Emmet.....	16390 05	28054 93	3425 60	593 00	53448 53	36942 56	21 21	89 01	16396 30	
Fayette.....	49554 07	56756 93	10645 23	1120 71	118076 94	71331 65	153 85	295 49	46395 95	
Floyd.....	19326 85	49029 96	7637 28	2019 32	74318 41	54353 37	34 20	556 55	13639 29	
Franklin.....	30530 60	37200 83	6846 40	1873 78	75941 54	50312 57	233 50	177 96	23217 56	
Fremont.....	28273 20	50996 08	6774 22	2099 79	94143 29	50025 99	134 55	397 65	34025 10	
Greene.....	38005 14	42303 02	11064 85	2745 42	94068 43	58460 05	100 62	473 18	35004 63	
Grundy.....	29078 33	41343 37	5643 31	799 29	75864 80	47790 14	89 32	171 59	27933 75	
Hamlin.....	31597 99	56264 73	6026 71	1393 64	95256 07	62926 88	187 02	1139 61	31004 53	
Hamilton.....	27340 35	42942 87	7334 65	1525 94	70698 81	51770 92	244 06	617 80	27061 05	
Hancock.....	24511 75	44645 50	5976 54	1164 80	72698 06	51642 12	241 49	341 48	24173 01	
Hardin.....	62318 13	61619 89	9921 41	2020 08	125374 51	73509 18	374 11	1404 53	56556 08	
Harrison.....	49101 07	61260 16	9877 20	2580 01	122318 44	78182 21	54 20	361 77	43350 26	
Henry.....	26198 62	35267 49	6523 77	943 64	69967 52	45272 86	136 40	79 00	23459 26	
Howard.....	15047 77	34820 91	9954 50	3498 92	60317 10	41539 41	104 58	473 35	13155 31	
Humboldt.....	23037 01	38746 34	5140 04	1556 27	71479 63	42965 23	67 99	532 21	37914 26	
Ida.....	23461 08	45226 03	4195 69	2496 21	81381 01	47290 59	95 80	339 90	35354 31	
Iowa.....	30543 79	45702 65	7003 75	5350 25	89105 44	56876 28	235 91	5362 12	23947 13	
Jackson.....	39371 73	47333 52	8423 30	3435 21	65963 71	59511 59	5 26	2919 32	39431 94	
Jasper.....	42059 01	63143 93	11944 65	1933 63	119191 27	77635 11	309 69	99 36	41137 09	

## ABSTRACT [B] REPORTS FOR 1904—CONTINUED.

## SCHOOL FINANCES.

COUNTIES.	TEACHERS' FUND.								
	DEBIT.				Total debit or credit.	CREDIT.			
	On hand at last report.	Received from district tax.	Received from semi-annual apportionment.	Received from other sources.		Paid teachers since last report.	Paid for library books.	Paid for other purposes.	On hand.
Jefferson .....	\$ 16948 89	\$ 30085 88	\$ 7224 17	\$ 1080 79	\$ 57739 22	\$ 86223 86	\$ 90 81	\$ 65 73	\$ 10881 38
Johnson .....	23923 80	57891 51	9648 10	2511 99	94068 40	70968 81	185 18	360 57	22851 84
Jones .....	81118 42	51078 86	9440 28	3001 88	94882 44	87373 86	161 40	1187 86	85161 08
Keokuk .....	88829 75	50887 47	8726 45	2049 65	90882 82	61180 96	413 60	697 35	87433 41
Kossuth .....	49794 79	68242 55	9121 58	1170 51	128229 88	81123 68	91 86	801 91	46813 86
Lee .....	15881 26	64266 50	11683 39	1804 96	98111 31	77408 22	198 65	416 54	15008 80
Linn .....	30438 05	155597 84	19480 87	8916 16	259477 42	166884 56	198 07	978 15	92171 64
Louis .....	22808 89	32629 01	6222 50	1885 48	68345 08	39000 48	84 90	1567 08	22873 88
Lucas .....	22111 64	81744 89	5129 86	865 04	59841 43	39140 48	161 48	105 98	20488 55
Lyon .....	22899 08	50455 88	6117 09	1808 28	83275 64	58614 80	189 80	649 80	80873 44
Madison .....	21437 06	41890 88	6805 40	1580 67	71164 08	49883 90	208 21	47 37	20880 60
Mahaska .....	21180 16	78760 08	8652 62	3623 68	107171 49	79558 18	180 57	2196 86	25140 88
Marion .....	36555 81	47705 29	8401 61	862 05	96854 87	56434 24	96 74	323 00	85501 79
Marshall .....	31085 05	78875 28	4428 80	9684 47	124228 66	87862 98	201 00	2943 28	88431 35
Mills .....	28153 56	43168 27	6818 80	3121 85	72256 48	48865 08	308 48	1008 57	26059 45
Mitchell .....	23210 06	38240 26	5689 02	1354 81	68746 22	12222 96	138 24	228 47	20555 55
Monona .....	37041 57	58378 45	5894 14	1112 49	98911 65	58901 54	187 78	686 86	87286 02
Monroe .....	15914 81	38887 47	7191 85	1738 08	58981 71	39640 80	204 49	827 35	18509 57
Montgomery .....	25529 67	48408 64	8584 88	411 01	88069 15	58319 76	80 71	115 96	27873 72
Muscatine .....	16278 00	68699 07	9813 86	4709 47	94800 40	76286 84	20 62	1190 94	14853 50
O'Brien .....	52566 77	60534 58	8065 80	2662 23	108890 88	87844 60	.....	2858 20	38487 47
Oceola .....	24300 42	.....	4059 84	568 50	58973 46	35297 85	163 08	54 70	38168 88
Page .....	43480 80	61386 96	6667 24	2236 91	118808 91	66215 84	278 18	506 88	44718 51
Palo Alto .....	22146 78	43335 88	5824 00	670 92	71878 18	49697 90	188 72	.....	21791 43
Plymouth .....	38262 45	64002 00	9094 96	2389 29	115298 70	72580 57	185 01	945 55	41669 57
Pocahontas .....	24890 82	43925 08	8809 24	2758 62	80168 80	54789 65	36 29	964 56	24808 30
Polk .....	108815 11	386772 58	85622 00	8001 81	450711 45	294833 97	54 94	2211 91	184061 68
Pottawattamie .....	57968 57	158649 29	18722 91	8410 28	239921 00	177888 08	430 12	623 07	60979 78
Poweshiek .....	32710 59	54826 42	9727 18	4071 83	101838 02	77814 57	245 45	798 06	32477 94
Riargold .....	25180 00	39270 04	5502 29	812 19	70714 61	46187 88	183 98	455 08	29687 72
See .....	80881 58	48695 88	7887 43	2000 16	59415 05	39294 47	774 38	2237 15	27059 15
Scott .....	91409 78	137904 78	21880 68	3062 10	253817 21	16545 49	228 85	462 04	87640 88
Shelby .....	27861 88	55469 88	9402 85	1562 13	98766 14	62484 46	189 98	118 12	81023 58
Shoux .....	42875 98	71483 88	7861 50	1148 91	122371 72	85068 88	296 52	149 78	87856 06
Story .....	40668 78	68846 91	10495 61	1889 50	117096 80	74569 47	315 99	108 88	42117 96
Tama .....	47075 85	65399 00	14184 85	1700 98	128210 18	75396 57	168 89	886 87	33812 80
Taylor .....	28168 43	46223 58	4068 02	1756 82	81125 88	55150 12	24 62	883 48	25618 16
Union .....	30165 55	4943 68	6235 88	1716 20	88000 76	57712 82	202 50	124 64	25680 80
Van Buren .....	26255 75	29506 07	5788 85	1599 19	68149 96	87018 98	74 10	894 89	25166 99
Wapello .....	24374 18	37813 94	10245 89	1200 50	123683 46	97259 24	848 48	2878 23	28147 46
Warren .....	24526 86	40515 48	8771 13	1808 09	75216 01	51960 48	258 66	214 27	22797 65
Washington .....	22729 26	40143 56	8406 87	2749 41	83924 60	58206 85	116 96	801 94	28608 85
Wayne .....	22388 84	38885 81	6567 85	1486 15	68908 15	48787 94	310 63	1943 18	23905 45
Webster .....	39011 53	74180 37	11625 81	847 48	116114 64	82642 89	258 68	106 81	83111 76
Winnebago .....	30851 78	81489 98	4821 64	898 85	87506 68	85884 20	149 71	41 92	21960 55
Winnebuck .....	30093 80	38690 80	9246 25	1428 56	75673 90	49026 20	809 21	590 21	25658 58
Woodbury .....	64559 49	170497 62	22796 27	2238 04	230078 73	178595 65	159 06	28545 45	72805 56
Worth .....	16845 15	23093 44	4975 80	800 14	44623 08	27702 75	.....	.....	19619 28
Wright .....	41628 82	54284 11	6425 61	1844 51	100657 65	64946 78	161 51	94 78	88454 68
Total .....	5234117 84	5608908 92	894411 26	100945 49	6891078 01	6841758 88	10738 65	100141 85	3323448 90

## ABSTRACT [B]—

## SCHOOL

COUNTIES.	SCHOOLHOUSE FUND.									
	Debts.			Total debit or credit.	Credit.					
	On hand at last report.	Received from district tax.	Received from other sources.		Paid for school-houses and sites.	Paid on bonds and interest.	Paid for library books.	Paid for other purposes.	On hand.	
Adair.....	\$ 895 81	\$ 8495 22	\$ 5217 50	\$ 7800 53	\$ 4745 82	\$ 1600 50	.....	\$ 358 78	\$ 894 43	.....
Adams.....	1836 78	8560 61	225 87	5328 26	58 88	976 53	.....	1046 18	2444 74	.....
Allamakee.....	529 24	2074 08	438 39	8057 81	1948 25	804 98	.....	808 81	630 83	.....
Annapoossee.....	7848 89	7847 51	10472 71	26169 11	6487 95	18888 02	.....	1205 05	4698 09	.....
Audubon.....	5261 09	5927 49	127 06	11815 63	7792 84	1466 98	.....	248 53	1807 88	.....
Benton.....	4051 91	6214 60	568 85	10680 86	1144 20	4647 00	\$ 8 20	2200 00	2386 96	.....
Black Hawk.....	17456 97	24938 45	296 81	42698 78	27818 89	10680 96	.....	2018 54	2223 34	.....
Boone.....	8529 63	11181 97	1828 85	15956 45	4784 49	5840 81	232 07	2368 40	2491 68	.....
Bremser.....	598 84	6548 42	741 97	8189 28	2402 28	1981 61	.....	2388 69	1441 67	.....
Buchanan.....	8405 78	8401 54	10081 28	16993 60	6184 15	8077 02	.....	8784 73	8892 70	.....
Buena Vista.....	12878 96	16267 08	6048 79	29195 36	9498 52	11171 59	.....	965 75	7559 49	.....
Butler.....	2108 71	9778 00	1296 60	13177 81	7512 99	3148 72	.....	940 72	1574 88	.....
Calhoun.....	14515 91	8847 94	5582 00	26895 85	18502 18	8764 41	.....	2637 67	2991 59	.....
Carroll.....	5581 81	4732 17	5684 35	15777 83	4184 10	5337 56	.....	2712 82	3036 35	.....
Cass.....	1924 45	5026 75	32 86	6983 54	1517 03	2152 49	.....	243 35	8070 67	.....
Cedar.....	2590 28	4977 06	516 64	8068 96	1863 60	2971 11	.....	1061 89	2187 88	.....
Cerro Gordo.....	6655 76	15712 93	48781 62	6600 81	50814 20	5117 47	.....	2363 90	6274 74	.....
Cherokee.....	2784 12	4106 10	589 88	7280 05	.....	2362 01	.....	1052 97	3295 07	.....
Chickasaw.....	5584 40	9015 45	689 70	9299 55	4270 29	2191 64	.....	1025 04	1814 58	.....
Clarke.....	2198 82	8891 15	815 88	6405 00	1246 00	3674 50	.....	539 06	945 43	.....
Clay.....	3028 05	7521 71	636 81	10296 55	1171 98	4486 94	269 71	2198 51	2158 41	.....
Clayton.....	1848 81	8048 37	1980 26	11852 44	4779 20	2659 89	.....	2142 69	2071 16	.....
Clinton.....	6491 82	15796 70	2204 15	24491 17	9652 57	7188 87	.....	1086 67	6713 06	.....
Crawford.....	8549 37	5158 87	1480 71	9198 45	2487 21	1649 00	244 62	3045 62	1772 00	.....
Dallas.....	8824 46	5871 07	8658 86	17828 89	8912 42	8882 82	8 10	1164 76	5115 79	.....
Davis.....	25029 87	7166 40	1048 56	83264 83	28777 98	2572 37	.....	770 02	1144 52	.....
Decatur.....	4248 46	5806 51	5046 44	15101 41	7832 60	4623 90	.....	1261 99	1882 92	.....
Delaware.....	2216 79	3781 00	389 42	5887 21	2228 29	504 90	11 85	1479 78	1162 89	.....
Des Moines.....	7981 79	18609 78	16968 21	38554 78	28577 18	8006 60	3 80	140 07	1829 63	.....
Dickinson.....	8617 45	5360 55	18400 00	22877 98	17153 27	1822 89	.....	799 25	2908 07	.....
Dubuque.....	1964 88	11774 08	268 81	14007 17	1371 48	10210 27	20 00	620 69	1784 78	.....
Emmet.....	2969 48	3921 77	9608 50	16494 70	11480 77	988 67	.....	857 32	8172 94	.....
Fayette.....	8798 78	9269 40	10784 61	28847 74	14268 81	4411 58	.....	466 71	4700 69	.....
Floyd.....	1649 98	11098 36	166 61	12914 90	4302 12	8082 11	.....	545 09	5005 58	.....
Franklin.....	1900 50	8111 49	2848 76	7855 75	8419 18	1616 48	.....	586 01	2225 13	.....
Frederick.....	2873 76	4790 51	864 82	8019 09	8949 76	1685 50	.....	94 19	1475 64	.....
Greene.....	2187 50	4927 41	869 91	7984 82	1377 90	1665 75	.....	3249 37	1691 80	.....
Grundy.....	3416 70	4812 18	2275 65	1504 48	2182 38	4487 86	.....	1874 57	2510 22	.....
Guthrie.....	4178 18	4462 09	406 90	9046 12	1909 46	2422 88	.....	1817 24	3197 09	.....
Hamilton.....	4984 58	11551 96	1728 90	17660 88	5763 82	5256 57	.....	3556 06	3064 98	.....
Hancock.....	8857 57	6597 81	9698 57	24898 95	9945 07	2015 72	.....	5630 29	7347 87	.....
Hardin.....	4930 88	9608 51	8622 37	18261 71	5820 25	5724 86	.....	1075 26	6141 34	.....
Harrison.....	7967 58	8724 16	4294 10	20915 88	6199 82	6732 96	.....	1041 85	6941 67	.....
Henry.....	1989 87	8548 94	3525 62	9018 83	1927 52	4990 92	.....	436 12	1659 27	.....
Howard.....	28 6 04	5296 70	56 69	8149 48	886 47	2897 14	.....	650 17	3755 65	.....
Humboldt.....	2582 97	3883 85	9600 00	15916 02	1202 87	1461 56	.....	870 44	12981 65	.....
Ida.....	2190 95	7484 00	5580 80	15255 75	251 55	7376 45	.....	4062 24	3555 51	.....
Iowa.....	14928 18	5268 19	2200 55	22891 92	10890 94	6153 28	1 25	1196 72	4136 78	.....
Jackson.....	2552 10	4481 86	5648 11	12626 57	5709 05	688 09	.....	8809 10	2426 33	.....
Jasper.....	4122 44	12191 46	554 47	16968 37	7464 57	1207 08	.....	4556 57	3580 20	.....

## REPORTS FOR 1904—CONTINUED.

## FINANCES.

## CONTINGENT FUND.

DEBIT.				CREDIT.											
On hand at last report.	Received from district tax.	Received from schoolhouse fund and other sources.	Total debit or credit.	Paid for fuel, rent, repairs, insurance and janitors.	Paid secretaries and treasurers.	Paid for records and apparatus.	Paid for library books and dictionaries.	Paid for free text-books.	Paid for general supplies.	Paid for other purposes.	On hand.				
\$ 7885 81	\$ 15295 56	\$ 609 47	\$ 28790 84	\$ 12285 48	\$ 1458 74	\$ 223 58	\$ 151 01	.....	\$ 588 69	\$ 1975 16	\$ 7187 78				
4282 59	12181 17	1019 76	17488 52	8980 48	1051 06	149 06	178 19	\$ 378 88	580 84	1056 50	5162 91				
3210 11	11056 70	1778 64	16047 45	7881 28	1085 82	164 52	81 72	78 28	976 88	1741 28	4212 82				
8796 12	19150 81	2367 08	80824 45	15748 54	1264 74	506 15	24 50	.....	888 16	682 96	11674 45				
7888 78	13896 40	2005 99	22718 17	18874 42	1265 95	504 78	22 15	628 82	485 40	1761 09	4670 61				
15074 88	22401 57	1898 09	39878 90	17048 80	1961 60	262 15	78 80	57 20	875 09	4468 88	14727 02				
18770 80	84047 72	5170 92	52988 95	24458 78	1700 89	1862 12	198 09	86 82	1511 92	12518 58	11202 85				
7073 08	22708 12	4120 01	38896 21	18474 91	2002 06	658 28	814 18	96 81	825 56	4808 65	7216 26				
5974 16	13676 02	1949 84	21496 52	13804 84	1179 57	298 19	124 48	85	699 49	696 78	5242 82				
7801 44	17822 96	1117 81	26741 71	14116 08	1611 85	121 62	108 70	11 04	1573 88	1849 20	7949 84				
10980 86	18808 81	8709 18	38416 80	16521 99	1808 58	709 45	129 80	482 41	976 97	8905 98	9986 62				
10687 81	18177 25	805 61	29170 67	11556 77	1688 78	877 74	208 99	8 50	1025 31	1574 29	12290 29				
7273 82	20484 86	4174 65	31841 88	17778 49	1646 81	2191 98	264 70	675 68	2581 81	1879 22	5418 69				
13873 68	21147 04	6853 72	41873 89	26214 55	1458 05	614 86	697 78	472 91	2707 81	8340 14	9467 87				
10406 40	22758 22	1850 62	34600 24	19580 77	1798 78	1044 51	185 78	20 22	1115 71	2668 02	8227 47				
11458 42	17995 88	1410 48	30649 28	18718 74	1697 00	850 89	75 45	12 90	650 60	2144 38	11905 82				
5566 98	24785 05	7849 57	37700 55	20484 29	1461 85	1287 78	102 81	.....	896 92	9688 89	6559 06				
9420 40	19884 68	1417 24	30222 82	14670 65	1785 65	251 79	64 50	.....	1229 28	1129 09	11141 41				
5522 19	12616 21	5502 67	23851 07	12451 88	1109 79	590 79	44 85	5 70	2287 79	8789 87	8120 95				
6305 95	11066 38	283 46	16904 75	10680 88	929 07	89 15	72 28	.....	116 85	620 87	3966 75				
7121 97	15750 86	1788 65	25210 98	11981 62	1174 61	50 69	86 72	79 61	858 16	4462 40	6516 97				
7356 96	21884 26	2800 04	31891 25	16261 99	1826 08	1576 42	186 87	191 08	1799 59	2586 22	7618 05				
14237 58	40608 64	1690 09	56470 81	29182 27	2270 07	1464 46	408 45	2929 58	1721 75	6495 40	12008 83				
18162 66	23798 65	6601 87	48568 18	20905 08	1817 81	1876 04	25 18	218 88	8258 81	8128 40	7880 68				
10687 56	22880 72	5569 10	38297 38	18773 21	1452 87	261 85	210 50	.....	1716 22	5448 51	10425 72				
3269 78	8056 47	698 42	12089 65	6548 94	1112 21	84 58	8 40	.....	154 02	2586 17	1600 88				
5735 51	12829 48	8202 04	21789 03	12174 68	1844 94	708 44	91 86	124 09	475 84	2789 55	4099 78				
7243 82	14814 05	1714 89	28471 77	11900 99	1278 88	656 70	185 44	.....	400 61	2400 88	6840 94				
10084 82	27405 17	1804 67	40204 65	21794 48	1443 09	484 88	326 58	471 55	1496 12	10524 23	8873 78				
3796 84	10611 47	1250 18	15589 99	6396 11	907 58	116 92	88 17	.....	858 82	2757 97	2456 42				
7027 05	32924 60	847 08	40796 68	24602 59	8525 00	696 42	237 97	.....	1778 72	3524 77	6643 21				
6664 85	11806 02	8079 72	21249 09	12484 46	754 06	55 85	28 74	.....	79 43	2922 17	4924 41				
12769 10	22411 60	821 27	36001 97	17277 99	1768 88	229 90	278 87	75 18	2053 86	4294 26	10090 58				
6678 26	18036 07	1212 39	25286 74	15722 29	988 40	372 68	151 05	5 82	1670 08	3558 88	5282 14				
7880 54	19880 75	5675 58	27424 82	15591 41	1639 45	46 71	80 18	53 58	696 49	1994 65	7812 42				
10709 07	16178 21	910 02	27792 80	18896 21	1814 82	999 26	125 14	11 21	148 78	1673 92	10123 96				
10746 54	18683 02	2660 12	31759 68	12768 87	1568 90	384 83	1248 41	412 62	2000 27	3640 49	9721 29				
7028 80	12854 12	254 24	20187 16	10667 90	1198 71	886 84	82 20	.....	85 58	682 16	6924 81				
10465 96	20415 96	1699 59	32654 54	19144 44	1262 31	453 74	65 68	.....	501 41	2417 86	8711 10				
10681 86	19116 61	2785 68	32788 60	15675 49	1587 88	662 72	106 59	2 15	2780 53	2085 90	10082 84				
7621 58	19162 00	3255 87	30085 90	16023 78	1169 50	158 29	78 00	813 45	2162 67	2065 49	8062 77				
11105 24	24256 58	3696 68	37740 45	19411 06	1774 88	79 26	191 98	.....	2527 89	1786 05	12020 76				
13979 14	22573 28	1883 02	37968 44	20908 09	1569 47	274 79	229 09	523 28	945 95	2844 82	11155 00				
6676 09	14122 64	1805 55	22206 28	11588 82	1211 08	1610 82	81 19	.....	161 60	4250 48	5149 84				
4306 76	12850 27	819 18	17889 16	11558 68	786 27	88 99	81 72	.....	252 48	452 21	4468 86				
5794 58	12541 88	1422 82	19759 18	9484 87	1028 41	480 58	95 62	5 00	555 60	8727 88	4485 77				
8545 80	14876 87	2962 80	21064 97	12858 06	1021 25	726 91	118 85	.....	.....	950 93	5498 97				
9112 51	17406 07	4936 42	31482 00	12906 22	1628 78	254 58	239 27	88 20	1068 51	6524 41	8771 28				
12187 48	20125 26	1868 28	34170 92	14465 75	1964 69	802 81	811 84	188 68	1688 89	8127 24	12212 52				
12415 76	21747 15	8911 99	59074 90	19263 99	1668 88	801 08	28 88	.....	1672 87	6669 82	8485 88				

## ABSTRACT [B]—

## SCHOOL

COUNTIES.	SCHOOLHOUSE FUND.									
	DEBIT.			Total debit or credit.	CREDIT.					On hand.
	On hand at last report.	Received from district tax.	Received from other sources.		Paid for school-houses and sites.	Paid on bonds and interest.	Paid for library books.	Paid for other purposes.		
Jefferson .....	\$ 548 84	1773 64	\$ 100 00	\$ 2487 98	\$ 179 87	\$ 708 40	.....	\$ 1219 88	\$ 838 03	
Johnson .....	2894 98	13107 53	5089 66	19533 12	10554 67	4402 00	\$ 2 80	2181 06	2391 43	
Jones .....	7178 48	4465 41	390 56	11984 45	8016 84	1688 73	.....	1424 51	804 33	
Keokuk .....	2106 82	9523 87	5358 41	16883 00	4905 44	7854 87	.....	967 53	3454 76	
Kossuth .....	8186 88	18708 51	2408 66	24301 00	5908 79	5834 98	.....	3998 76	9058 62	
Lee .....	904 06	8791 94	1416 25	6102 25	2111 24	2000 00	.....	1551 46	439 55	
Linn .....	3258 97	40081 74	11051 54	55243 25	27098 53	15001 72	6 00	1445 14	11719 91	
Louis .....	1890 86	4388 88	1079 55	6778 24	8556 12	824 17	.....	1235 54	1162 41	
Lucas .....	1427 47	8070 69	564 51	10062 67	1225 43	6187 32	.....	667 92	2012 10	
Lyon .....	4281 86	19054 75	2154 45	25441 06	8305 69	11882 14	16 18	2476 98	7790 13	
Madison .....	4408 77	6610 62	1903 19	13922 58	7717 85	3126 48	.....	373 76	1404 49	
Mahaaka .....	2587 07	8544 18	2889 52	13990 78	6655 50	8075 40	150 94	2211 47	1699 47	
Marion .....	16185 58	6698 17	5418 82	28297 07	14445 68	3824 48	.....	1781 68	8265 28	
Marshall .....	2110 62	15395 53	467 44	17878 59	918 06	8480 28	18 60	9336 15	4170 41	
Mills .....	7729 68	4787 28	8090 76	15537 72	8396 10	8710 06	.....	647 91	2833 68	
Mitchell .....	1479 49	2874 44	1174 41	5028 84	189 75	1818 00	.....	1089 65	1695 34	
Monona .....	7667 04	9067 84	2539 57	19804 45	7692 26	8414 00	.....	940 63	7257 96	
Monroe .....	2937 07	7096 69	10988 53	20917 84	6453 82	4587 89	.....	536 97	9336 08	
Montgomery .....	1836 26	9252 19	2076 12	13194 57	800 00	2961 38	.....	7268 84	2734 35	
Muscatine .....	19 45	6848 88	8 21	6876 54	837 65	3719 36	551 54	1539 26	188 28	
O'Brien .....	8098 95	12963 61	1894 76	19257 82	7277 88	6569 73	.....	1149 68	3220 53	
Oceola .....	6948 45	7015 82	8202 25	22106 02	16478 96	1704 87	.....	1400 15	2587 04	
Page .....	7255 52	8948 49	896 91	16590 92	5702 84	6461 89	.....	701 85	3724 54	
Palo Alto .....	5380 21	4018 67	2942 99	10041 87	2161 89	2146 65	.....	898 26	4888 57	
Plymouth .....	7739 42	9850 49	25307 46	43497 36	1777 67	10687 77	.....	17875 76	12356 16	
Pocahontas .....	1978 74	9463 41	15875 45	27381 00	9717 09	7579 10	.....	1928 46	8096 95	
Polk .....	86449 52	57810 18	8208 44	102463 14	629 49	29048 89	.....	4288 96	6125 06	
Pottawattamie .....	8430 44	28292 25	1128 43	84455 12	7366 46	2234 89	.....	2984 95	3899 22	
Poweshiek .....	10586 84	12764 88	43444 30	66796 02	56199 52	1736 18	.....	1450 62	7409 75	
Ringold .....	6579 72	6854 85	784 77	13669 84	5799 92	2409 27	11 20	280 25	5168 70	
Sac .....	7101 10	18210 61	5410 82	25722 53	19617 22	5968 20	.....	3556 27	3585 84	
Scott .....	4708 88	25372 27	11718 16	147894 29	29486 27	22611 85	.....	554 74	94811 43	
Shelby .....	1461 88	6040 93	791 52	9194 06	1085 27	5652 66	.....	1071 88	1434 20	
Sioux .....	6073 09	10964 16	594 85	17061 06	2815 15	4797 06	.....	2023 23	7435 62	
Story .....	8297 00	7226 96	23613 25	33135 61	26690 58	5556 88	59 34	915 12	5013 79	
Tama .....	7016 42	10118 75	18896 33	35994 50	14512 08	8105 87	.....	3494 73	14854 17	
Taylor .....	1896 44	4770 79	23757 82	35424 05	17909 06	3051 04	.....	787 29	14676 66	
Union .....	8191 61	11821 81	769 16	20782 08	11093 85	1908 90	.....	457 93	7326 90	
Van Buren .....	5681 84	4775 98	142 94	10600 71	3721 84	2185 08	.....	703 61	5040 68	
Wapello .....	2995 78	15599 87	1616 30	30211 90	11096 54	6078 62	.....	501 76	2569 98	
Warren .....	2371 12	7541 62	19160 56	29273 80	24316 86	2493 80	.....	900 78	1062 36	
Washington .....	863 20	5545 97	8167 96	9577 10	3529 18	5767 96	8 12	776 25	1901 19	
Wayne .....	2564 84	5387 81	2359 63	10610 78	6972 21	2952 97	.....	681 51	674 09	
Webster .....	3250 47	16671 83	11018 26	30449 12	20717 35	4541 73	.....	2516 85	3073 69	
Winnebago .....	2930 47	5999 64	1898 17	10198 28	2387 96	4142 75	.....	2356 02	1942 15	
Winneshiek .....	5145 16	6564 98	2785 39	14495 53	5267 73	8231 74	.....	1488 85	2407 21	
Woodbury .....	8939 20	51246 71	1915 87	57051 78	32471 72	16329 45	.....	1638 52	6112 09	
Worth .....	9116 95	5896 96	1898 86	14877 27	10005 69	2504 15	11 76	12 10	1843 64	
Wright .....	4177 79	6530 89	156 86	10965 54	8501 94	1661 58	.....	2005 09	3696 08	
Total .....	502555 75	929182 85	621844 86	2052592 96	902745 95	484871 96	1619 63	182985 40	409800 02	

## REPORTS FOR 1904—CONTINUED.

## FINANCES.

## CONTINGENT FUND.

DEBIT.			CREDIT.									
On hand at last report.	Received from district tax.	Received from schoolhouse fund and other sources.	Total debit or credit.	Paid for fuel, rent, repairs, insurance and janitors.	Paid secretaries and treasurers.	Paid for records and apparatus.	Paid for library books and dictionaries.	Paid for free text-books.	Paid for general supplies.	Paid for other purposes.	On hand.	
\$ 3308 22	7877 01	\$ 1880 07	\$ 15855 80	\$ 8192 50	\$ 1095 97	\$ 179 80	\$ 100 08	.....	\$ 889 18	\$ 865 43	\$ 4522 20	
7085 80	24084 15	4597 04	35716 99	18622 57	1874 00	1545 07	176 68		8044 06	8808 85	6240 08	
9088 21	16480 07	4569 02	30113 80	15004 28	1885 04	289 07	117 08	\$ 92 92	1508 37	1987 28	8802 41	
7488 41	21486 79	2778 15	31068 28	14805 02	1243 88	616 78	108 81	8 00	494 65	8006 21	9855 43	
98482 02	35779 41	1886 64	36118 07	21261 22	1956 91	684 75	288 15	7 97	955 88	2110 47	11898 87	
3304 54	26159 89	1006 11	29429 54	16897 75	1583 45	851 86	50 15	18 00	1187 71	2968 40	5917 78	
9870 25	64192 54	18080 54	92883 33	58112 70	8828 47	718 07	415 02	5898 08	5150 28	14889 96	9075 21	
8808 28	11896 45	1858 58	17812 81	7711 06	1017 40	207 08	174 08	.....	618 18	8802 85	8889 47	
8882 09	12761 04	1171 20	17564 98	11045 06	1158 20	574 58	73 79	15 78	274 00	983 98	8441 01	
11045 54	18765 72	1194 99	31006 25	15545 10	1784 06	824 96	70 47	204 72	480 80	1459 59	11136 43	
9897 06	17593 64	818 08	26897 78	14971 50	1076 84	21 81	22 89	.....	1094 77	1618 58	7195 75	
12647 78	19797 10	8045 38	35580 18	20541 06	1770 55	837 28	187 84	7 95	223 82	2880 90	9680 08	
10640 51	20612 47	1367 99	28981 97	14177 80	1840 14	1107 21	143 76	5 00	1247 02	2429 95	11800 50	
8859 64	26892 88	4058 23	42145 80	21411 47	1681 88	575 85	1089 06	2606 92	1192 10	2580 71	9898 27	
8496 98	18777 22	3284 27	25478 47	11641 06	1444 41	651 02	63 70	607 10	566 02	8252 01	7247 95	
8236 42	18015 26	2637 06	24000 78	11809 97	982 08	272 11	70 15	.....	1064 59	1640 54	5880 74	
6885 05	22078 99	4596 35	33555 39	16850 10	1010 06	1067 69	74 82	.....	1802 29	5330 53	7759 80	
2362 48	9974 89	2688 07	18840 44	8106 78	1204 80	320 92	210 95	11 70	563 87	2488 62	3079 95	
7973 84	14429 82	6109 42	28571 28	10778 55	1079 88	747 86	11 00	.....	1194 25	1867 17	7802 57	
3853 99	25560 40	3251 01	30978 50	15742 08	1685 12	216 44	90 61	50 51	6290 11	4534 79	8165 09	
6199 08	26144 01	8484 14	32827 18	19073 87	1897 94	277 82	92 11	12 00	1666 99	8658 67	6400 88	
9059 20	10545 79	707 06	17812 02	9400 72	920 25	506 23	92 17	.....	808 54	868 63	5128 43	
9860 58	22750 18	2354 19	35054 85	16801 81	1807 09	166 85	87 75	418 15	1482 49	9080 83	11810 88	
2748 94	16430 70	858 92	20053 56	11780 24	1076 80	286 72	98 15	.....	322 88	1026 66	5495 63	
9047 75	22530 95	1028 14	32565 87	16567 51	2462 50	718 92	387 10	.....	247 60	8241 08	9852 16	
8086 02	16708 78	1822 04	26551 79	14935 85	1857 80	148 77	53 78	149 74	788 00	8080 28	6883 99	
11315 80	118974 22	9971 88	185100 80	98444 20	4808 29	548 60	476 21	2472 06	9681 67	12910 63	12374 24	
15286 37	66283 81	6198 88	87730 06	57764 80	8144 88	1240 41	165 87	4842 23	9887 58	5996 16	13980 68	
8904 86	20616 94	9962 60	38078 10	18117 03	1212 09	509 24	248 40	790 49	3259 21	1400 67	7559 77	
7386 57	12818 70	700 32	20690 59	11969 80	1242 75	505 19	80 30	12 50	92 70	407 55	6640 40	
9243 91	16880 91	8504 40	29008 22	16877 83	1288 79	581 82	268 95	4 74	629 98	2208 12	7653 54	
8972 11	73240 97	9723 61	96869 69	45188 28	8096 85	511 01	89 05	.....	8696 50	19163 06	16944 94	
10570 73	19871 62	2126 95	32669 80	18742 77	2812 55	853 91	487 17	141 63	9016 84	262 81	12578 12	
9732 78	26345 85	8862 40	39960 49	21841 12	2493 58	530 54	197 49	188 72	1160 81	2291 74	8242 49	
8972 62	26479 14	7186 88	40632 64	22006 43	1560 78	726 09	221 45	258 63	1662 98	4680 28	8886 00	
13627 85	28586 40	8775 81	40896 08	17629 75	2181 87	402 74	290 66	220 37	1404 62	8967 36	14849 69	
8482 08	17788 98	833 66	27097 72	18079 90	1360 57	894 81	17 08	4 88	842 63	2696 84	8762 51	
9074 09	18083 22	5849 44	27356 75	18885 86	1164 40	118 11	228 58	89 39	2860 14	5506 28	3549 49	
5590 98	9586 08	405 70	15502 71	8019 98	968 56	55 74	29 56	189 82	450 98	1089 67	4729 90	
5384 80	30704 83	1913 76	38183 39	24885 85	1848 46	2357 46	15 85	17 59	900 42	4601 40	4582 86	
7085 80	16054 54	4498 41	28417 81	12994 26	1490 99	778 71	85 74	.....	1710 46	2365 63	9102 02	
8890 91	14976 12	2074 49	25141 52	13891 86	1441 18	404 98	126 82	12 25	151 00	2396 97	6677 46	
4128 55	18406 96	2300 35	19896 16	9655 74	966 90	124 10	4 10	81 27	459 50	3811 49	5006 86	
8442 75	27640 57	2902 95	38986 28	22898 43	1937 94	415 26	235 56	10 04	832 76	8026 11	9030 18	
8715 77	16708 65	1623 42	24042 84	10688 72	944 65	898 04	78 85	86 18	408 18	4378 95	6675 77	
8801 92	14580 18	1477 19	21509 24	12887 28	1877 30	485 52	118 77	10 85	968 49	1341 23	4385 80	
14697 78	68809 59	4893 82	80565 47	61196 14	2494 12	1832 56	641 88	594 98	596 43	4182 10	9739 77	
4908 98	8584 91	1280 80	18869 19	7256 94	728 37	142 85	87 66	2 80	812 50	1620 38	8717 69	
8568 35	22906 78	4898 17	36864 80	21973 84	1378 50	657 09	75 57	.....	1845 81	2449 88	8484 61	
512894 89	2181104 89	201977 67	3288976 92	1750870 78	159620 14	54824 12	16982 48	28009 77	181810 28	381587 94	772541 51	

## ABSTRACT [C]

## EXAMINATION

COUNTIES.	1st grade certificates issued.		2d grade certificates issued.		3d grade certificates issued.		Special certificates issued.		Kinder- garten certificates issued.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Adair .....	9	41	4	74	20	128				1
Adams .....	7	23	80	155				2		
Allamakee .....	1	6	11	79	7	104		2		6
Appanoose .....	8	14	25	102	16	92	1	9		9
Audubon .....	8	21	18	75	12	90				
Benton .....	4	46	26	159						
Black Hawk .....	8	33	12	133			1	5		6
Boone .....	11	45	12	127	10	84		1		
Bremer .....	2	30	13	138						1
Buchanan .....	10	60	23	151	2			2		
Buena Vista .....	9	30	7	120	1	15				
Butler .....	10	42	20	137						
Calhoun .....	6	44	8	146	4	65		6		
Carroll .....	4	60	12	70	4	24	2	7		
Cass .....	5	50	5	192		9		5		
Cedar .....	7	23	14	141	2	23		2		
Cerro Gordo .....	7	34	14	171	8	37	1	6		
Cherokee .....	4	27	12	130	8	43				
Chickasaw .....	4	18	8	70	9	60	4	20		
Clarke .....	3	17	11	56	23	34		2		
Clay .....	4	44	13	114	3	51		3		
Clayton .....	4	19	20	146	13	57	4	2		
Clinton .....	6	21	7	168	13	163	3	6		
Crawford .....	10	44	12	174	3	73	1	4		1
Dallas .....	5	27	23	203	10	45		3		
Davis .....	13	6	15	45	9	62				
Decatur .....	8	23	11	81	19	103		1		
Delaware .....	8	17	3	65	1	64		6		
Des Moines .....	4	13	13	153			8	3		3
Dickinson .....	9	14	4	33	1	11		1		
Dubuque .....	5	3	4	163		102	2	2		13
Emmet .....	3	22	3	70	1	37		5		
Fayette .....	4	30	9	141	5	31	5	43		
Floyd .....	4	23	10	100			4	7		2
Franklin .....	2	14	12	96	10	67	1	5		
Fremont .....	3	19	6	132	6	55				
Greene .....	5	20	10	133	5	34				
Grundy .....	7	21	16	103						
Guthrie .....	11	47	15	90	22	107				
Hamilton .....	2	10	7	103	9	97	4	2		2
Hancock .....	9	24	13	142	5	50	1	1		
Hardin .....	4	24	13	120	14	35	2	5		1
Harrison .....	3	40	10	133			1	2		
Henry .....	7	21	21	124	3	33		2		1
Howard .....	3	36	3	93	4	40		4		
Humboldt .....		10	3	93	3	69		3		
Ida .....	6	20	7	33	4	30				
Iowa .....	4	27	22	120	3	65	1	7		
Jackson .....	4	13	9	103	5	79				
Jasper .....	3	23	32	242						

# REPORTS FOR 1904. OF TEACHERS.

Total number issued.		Applicants rejected.		Applicants examined.		Different persons licensed.		Average age of applicants.		No experience in teaching.		Taught less than one year.		Holding state certificates or diplomas.	
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
38	244	8	31	36	275	33	196	26	21	9	45	6	29	4	3
87	185	8	46	45	231	24	134	23	20	1	20	2	32	1	1
19	197	2	42	21	239	12	148	...	31	4	23	2	3	2	3
50	226	8	51	58	277	46	211	25	23	10	31	6	17	3	4
28	136	8	33	31	219	20	138	23	22	5	30	5	31	2	4
30	205	9	38	39	248	35	200	23	22	5	31	16	50	9	7
16	227	8	76	24	305	16	220	23	21	4	27	6	43	...	39
33	257	2	18	35	275	39	190	26	22	4	34	5	44	...	25
15	169	3	16	18	185	14	147	21	20	4	19	5	32	2	5
35	219	1	7	36	220	28	178	24	22	9	49	8	41	4	41
17	163	2	22	19	185	15	131	23	21	1	18	14	73	5	20
30	199	7	56	37	265	30	199	25	21	8	32	4	7	9	23
18	261	8	27	26	288	14	208	23	23	2	33	4	69	6	11
22	161	4	55	26	316	22	161	23	21	2	7	5	30	5	10
10	256	4	64	11	320	10	180	23	21	3	33	4	60	5	10
21	199	1	18	22	217	18	171	25	22	5	39	2	19	7	15
30	243	10	68	40	316	28	231	23	23	11	30	16	62	3	14
19	200	1	60	20	260	17	160	27	22	3	22	5	19	6	12
25	153	4	31	29	189	7	150	21	24	3	15	3	21	3	6
37	159	9	25	46	184	28	109	25	21	3	14	3	12	1	3
18	212	6	12	24	224	10	161	...	...	2	43	3	64	2	5
41	224	9	72	50	296	37	233	27	22	12	31	5	9	1	5
29	360	3	51	32	411	20	322	23	24	7	40	1	29	4	7
36	301	1	38	27	339	19	231	...	...	2	28	4	32	6	6
38	278	1	19	39	297	34	224	23	20	9	41	17	79	5	14
35	112	5	17	40	129	40	108	26	23	12	29	4	20	1	3
39	203	8	15	41	223	33	169	22	22	18	40	4	25	4	5
7	153	...	39	7	192	7	138	25	19	1	28	1	33	2	3
30	137	2	8	32	195	25	170	32	26	4	30	1	16	3	33
14	109	1	25	15	134	15	110	25	23	1	19	1	9	3	7
11	236	...	15	11	306	11	237	34	26	3	12	3	16	4	2
7	134	...	27	7	161	7	104	27	23	2	21	...	8	1	11
23	243	11	60	34	303	23	243	22	21	5	26	5	41	3	10
18	196	...	47	18	243	7	159	24	21	5	21	1	15	4	21
25	162	11	62	36	244	20	149	23	21	6	26	4	15	3	10
20	203	4	13	24	219	19	193	21	20	4	25	2	6	7	3
20	137	10	59	30	246	23	239	20	22	4	15	1	16	5	3
23	130	9	21	32	151	23	123	21	19	2	24	3	11	3	9
43	244	1	20	49	264	45	201	23	23	14	23	3	31	3	3
22	214	4	45	26	259	18	133	26	22	5	29	5	36	4	10
33	217	10	33	43	255	24	149	26	22	5	20	3	37	5	3
33	256	9	49	47	294	20	135	24	21	6	55	7	53	3	19
14	175	5	30	19	255	14	173	20	19	2	43	...	17	10	24
31	131	2	36	33	217	27	152	26	23	9	33	3	22	1	1
15	173	3	18	13	193	14	175	23	20	4	19	2	18	2	6
11	130	1	37	12	317	10	157	23	22	3	15	4	27	6	3
17	133	...	3	17	132	12	117	...	24	3	15	5	23	4	2
35	219	3	27	33	246	31	162	31	22	6	34	11	32	3	7
13	203	1	6	19	209	13	204	23	26	3	49	1	23	4	3
36	370	9	170	44	440	29	217	23	24	3	33	5	33	4	16

## ABSTRACT [C]—

## EXAMINATION

COUNTIES.	1st grade certificates issued.		2d grade certificates issued.		3d grade certificates issued.		Special certificates issued.		Kinder- garten certificates issued.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Jefferson.....	5	13	13	121	3	51	.....	.....	2	.....
Johnson.....	1	23	39	273	.....	.....	5	.....	2	.....
Jones.....	4	30	14	156	.....	.....	.....	.....	.....	.....
Keokuk.....	11	35	42	234	.....	.....	.....	.....	4	.....
Kossuth.....	10	32	8	163	4	36	.....	.....	1	.....
Lee.....	6	10	9	146	6	56	4	8	.....	.....
Linn.....	3	13	21	133	7	123	2	13	.....	.....
Louis.....	2	19	6	49	16	71	.....	.....	.....	.....
Lucas.....	.....	13	8	52	23	95	.....	.....	.....	.....
Lyon.....	5	24	16	96	8	17	1	5	.....	.....
Madison.....	3	13	10	151	4	73	.....	.....	.....	.....
Mahaska.....	2	11	13	30	21	220	2	5	.....	5
Marion.....	7	16	13	65	21	37	1	5	.....	1
Marshall.....	1	16	17	113	9	106	1	9	.....	3
Mills.....	3	17	9	30	2	23	.....	8	.....	.....
Mitchell.....	5	12	4	132	.....	.....	.....	1	.....	.....
Monona.....	4	40	4	122	1	42	.....	.....	.....	.....
Monroe.....	4	11	7	32	12	31	.....	11	.....	.....
Montgomery.....	10	31	12	94	4	45	.....	8	.....	.....
Muscatine.....	2	37	8	63	8	93	.....	3	.....	.....
O'Brien.....	7	40	13	103	13	74	1	4	.....	1
Osceola.....	5	18	9	79	1	27	.....	1	.....	1
Page.....	5	20	8	120	12	72	1	5	.....	.....
Palo Alto.....	1	47	5	91	2	13	1	4	.....	.....
Plymouth.....	4	23	14	140	3	33	.....	2	.....	.....
Pocahontas.....	5	55	14	71	7	23	.....	.....	.....	.....
Polk.....	4	93	20	193	.....	.....	20	106	.....	34
Pottawattamie.....	3	124	17	259	.....	.....	2	12	.....	17
Poweshiek.....	7	40	7	101	5	56	.....	11	.....	3
Ringgold.....	6	23	14	33	7	95	.....	2	.....	.....
Sac.....	10	39	5	95	7	100	.....	.....	.....	6
Scott.....	6	5	30	236	.....	.....	7	30	.....	.....
Shelby.....	10	19	20	127	.....	.....	10	10	.....	.....
Sioux.....	16	47	21	120	11	74	.....	5	.....	1
Story.....	5	5	53	200	1	35	.....	3	.....	.....
Tama.....	11	30	24	195	.....	.....	1	1	.....	.....
Taylor.....	6	36	7	111	3	47	1	1	.....	.....
Union.....	3	25	13	37	9	44	2	5	.....	3
Van Buren.....	4	17	12	76	13	73	.....	1	.....	.....
Wapello.....	5	13	10	197	7	34	4	15	.....	.....
Warren.....	6	21	11	123	11	37	.....	1	.....	.....
Washington.....	6	24	27	203	.....	.....	.....	.....	.....	3
Wayne.....	11	3	31	95	24	103	.....	.....	.....	.....
Webster.....	1	45	20	169	6	43	.....	5	.....	.....
Winnebago.....	9	27	13	102	1	43	.....	7	.....	.....
Winne-hiek.....	6	10	14	125	10	54	.....	5	.....	1
Woodbury.....	12	57	3	142	.....	30	3	6	.....	1
Worth.....	3	19	14	69	.....	.....	.....	.....	.....	.....
Wright.....	3	33	11	145	12	31	1	4	.....	.....
Total.....	553	2733	1335	12559	620	4390	121	602	.....	146

1904]

## REPORT OF COUNTY SUPERINTENDENTS.

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REPORTS FOR 1904—CONTINUED.  
OF TEACHERS.

Total number issued.		Applicants rejected.		Applicants Examined.		Different persons licensed.		Average age of applicants.		No experience in teaching.		Taught less than one year.		Holding state certificates or diplomas.	
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
21	187	24	24	211	18	140	27	28	4	88	8	81	4	7	7
48	288	10	47	808	30	182	21	22	2	81	8	58	8	11	11
18	180	67	18	253	16	117	25	88	4	28	2	20	5	7	7
32	278	45	58	316	48	178	26	26	8	88	8	19	10	6	6
28	230	141	88	871	17	191	24	24					7	14	14
26	287	6	25	226	28	206	25	27	2	16	2	27	4	8	8
34	180	109	40	446	82	878	25	22	0	42	10	84	12	37	37
30	160	65	28	174	19	127	27	22	0	24	5	29	8	6	6
18	144	27	56	187	23	122	28	25	2	8	4	8	4	4	4
37	242	5	90	149	25	184	32	21	5	30	8	14	6	12	12
35	321	66	17	808	16	228	28	25	6	24	7	44	6	4	4
42	174	88	30	404	88	276	24	28	5	26	5	51	8	2	2
28	287	95	44	280	88	148	28	28	5	20	5	12	8	5	5
19	128	88	51	840	20	200	25	24	4	27	1	18	8	40	40
9	146	27	20	155	17	108	32	28	2	19		22	8	7	7
9	204	30	9	211	10	188	24	28		20		18	2	2	2
23	155	17	10	208	21	182	27	22	2	16	1	10	4	7	7
28	178	47	26	182	26	178			2	87	4	45	2	9	9
18	196	5	19	201	16	162	28	25	2	28		40	4	5	5
41	222	18	41	225	81	195	26	22	8	49	11	85	5	21	21
18	126	29	10	155	15	112	27	22	1	12	1	86	1	8	8
26	817	65	38	282	30	182	28	28	5	82	4	18	10	28	28
21	100	72	16	282	7	187	28	28	4	43	4	76	2	6	6
26	201	38	28	284	18	190	28	22	1	41	1	64	4	4	4
44	164	61	32	218	22	186	24	32	7	28	15	59	5	18	18
27	828	78	52	604	40	518	32	27	9	80	16	115	18	80	80
19	412	92	42	504	20	850	25	28	8	75	6	50	18	48	48
27	211	30	28	241	19	174			6	84	8	42	4	8	8
27	218	74	36	287	24	167	25	28	6	49	2	55	4	2	2
22	240	56	22	296	14	161	29	28	4	21	6	8	8	9	9
49	821	14	43	335	89	229	31	28	6	22	8	18	10	1	1
40	156	88	50	189	40	156	24	28	5	45	5	50	4	5	5
48	247	37	58	284	41	192	26	22	11	58	7	84	4	9	9
50	248	21	64	264	25	156	20	22	12	78	12	100	5	9	9
26	228	68	42	289	30	210	26	22	6	46	8	25	2	12	12
17	196	80	18	275	14	175	25	22	2	20	8	40	8	6	6
27	169	8	28	177	26	170	25	29	1	17	2	11	4	2	2
34	172	8	80	180	29	180	26	26	10	28	8	16	4	1	1
28	814	72	30	896	18	227	27	24	1	21	1	22	8	15	15
28	215	28	33	219	27	204	31	30	5	43	9	77	5	6	6
28	226	70	40	808	27	181	24	22	7	25	5	19	8	12	12
28	206	7	26	218	60	158			8	49	10	50	2	8	8
27	287	64	82	881	24	230	22	23	7	47	5	40	5	16	16
28	179	15	28	194	20	121	24	21	8	40	8	16	8	7	7
30	185	121	56	816	26	152	25	28	8	9	9	87	8	8	8
23	226	86	32	273	28	242	28	22	8	56	1	25	10	27	27
17	88	16	21	104	17	88	24	22	9	16	11	9	8	1	1
33	228	21	38	254	24	158	21	28	7	47			7	16	16
284	2100	428	125	8107	25155	2288	17922	225	228	498	2981	480	8814	453	1147

\*Average.

## ABSTRACT [D].

## VISITATION OF SCHOOLS, APPEALS, ETC., 1904.

COUNTIES.	VISITATION OF SCHOOLS.		EDUCATIONAL MEETINGS.			AP-PEALS.	C'MP'N SATION OF CO. SUPTS.	COLLEGES AND PRIVATE SCHOOLS			
	Schools visited by county superintendent.	Visits made during the year.	County associations.	Township meetings.	Educational meetings held.	Cases decided by county superintendent.	Received for official services from Oct. 1, 1903, to Oct. 1, 1904.	Number.	Teachers employed.	Students attending.	Number of graduates, 1904.
Adair	94	96	Yes.	Yes.	18	1	\$ 1250 00				
Adams	47	60	No.	Yes.	5		1250 00	1	5	69	8
Allamakee	84	87	No.			3	1250 00	3	10	353	7
Appanoose	30	30	Yes.	Yes.			1250 00				
Audubon	47	58	Yes.	Yes.	11	1	1250 00				
Benton	110	127	Yes.	Yes.	10		1250 00	7	25	732	85
Black Hawk	25	30	No.	No.	3		1250 00	6	80	3171	239
Boone	90	90	Yes.	No.	3		1250 00	1	5	180	2
Bremer	110	132	Yes.	Yes.	3		1250 00	14	24	686	145
Buchanan	150	160	No.	No.			1250 00	4	11	262	2
Buena Vista	102	109	Yes.	Yes.	1		1250 00	1	15	204	6
Butler	177	190	Yes.	Yes.	6		1250 00				
Calhoun	120	136	Yes.	No.	3	2	1250 00				
Carroll	46	50	No.	Yes.	3		1250 00	7	22	965	28
Cass	30		Yes.	Yes.	12		1250 00				
Cedar	68	70	Yes.		2	1	1249 94	4	5	172	72
Cerro Gordo			Yes.	No.			1249 99	4	25	525	25
Cherokee	182	200	Yes.	No.	14		1249 96	2	6	185	6
Chickasaw	75	90	Yes.		2		1250 00	7	26	642	4
Clarke			Yes.	Yes.			1250 00				
Clay	120	153	Yes.	No.	5		1250 00	1		45	10
Clayton	170	190	No.	Yes.	7		1250 00	2	10	385	
Clinton	107	219	Yes.	Yes.	15	2	1250 00	15	55	1450	126
Crawford	114	114	Yes.	No.	10		1250 00	8	19	642	87
Dallas	152	176	Yes.	Yes.	13		1250 00	1	4	140	9
Davis			Yes.	No.			1250 00	1	5	275	33
Decatur	50	70	Yes.	No.	1		1250 00	1	8	124	8
Delaware	90	95	No.	No.	1		1250 00	2	23	242	13
Des Moines	43	46			2		1250 00	4	22	918	
Dickinson	80	104	Yes.	No.	3	2	1250 00				
Dubuque	134	163	Yes.	Yes.	3		1500 00	23	171	5530	214
Emmet	109	332	Yes.	Yes.	8		1250 00				
Fayette	70	75	Yes.	Yes.	10		1250 00	7	31	527	19
Floyd	161	177	No.	No.	8		1250 00	3	29	484	64
Franklin	105	110	No.	Yes.	6		1250 00	1			
Fremont	148	148	No.	No.	2		1250 40	1	18	166	9
Greene	85	85	Yes.		2		1250 00	1	3	70	
Grundy	90	60	No.	No.			1250 00				
Guthrie	40	45	Yes.	Yes.	9	1	1250 00				
Hamilton	102	112	Yes.	No.	4		1250 00				
Hancock	122	146	No.	No.	7	1	1250 00				
Hardin	156	178	Yes.	Yes.	3		1250 00	2	17	448	43
Harrison	70		No.	No.	4		1250 00	1			
Henry	35	50	Yes.	Yes.	18		1250 00	7	45	1184	58
Howard	103	145	No.	No.	2		1247 36	3	9	253	30
Humboldt	121	174	Yes.	Yes.	6		1250 00	1	18	374	36
Ida	103	205	Yes.	Yes.	13		1250 00				
Iowa	140	160	Yes.	Yes.	20	1	1250 00	3	4	193	30
Jackson	56	61	No.	No.	4		1250 00				
Jasper	100	100	No.	Yes.	20		1250 00	1	3	83	20

## ABSTRACT [D]—CONTINUED.

## VISITATION OF SCHOOLS, APPEALS, ETC., 1904.

COUNTIES.	VISITATION OF SCHOOLS.		EDUCATIONAL MEETINGS.			AP-PEALS.	O'M'P'N SATION OF CO. SUPTS.	COLLEGES AND PRIVATE SCHOOLS			
	Schools visited by county superintendent.	Visits made during the year.	County associations.	Township meetings.	Educational meetings held.	Cases decided by county superintendent.	Received for official services from Oct. 1, 1903, to Oct. 1, 1904.	Number.	Teachers employed	Students attending.	Number of graduates 1904.
Jefferson.....	126	152	Yes..	No..	2	1	1250 00	8	26	364	21
Johnson.....	102	102	Yes..	Yes..	25		1250 00	9	178	2188	471
Jones.....	70	75	Yes..	No..	2		1250 00				
Keokuk.....	74	88	Yes..	Yes..	36		1250 00				
Kossuth.....	92	92	Yes..	Yes..	9	1	1475 00	6	18	484	80
Lee.....	84	90	No..	No..	8		1250 00	2	7	175	18
Linn.....	120	142	Yes..	No..	6	1	1250 00	7	82	1838	188
Louisa.....	85	97	No..	No..	4		1250 00				
Lucas.....	84	84	Yes..	No..	2		1250 00	2	5	115	
Lyon.....	55	64	Yes..	Yes..	14	1	1250 00	1	4	106	
Madison.....	117	117	Yes..	Yes..	4		1250 00				
Mahaska.....	75	75	No..	No..	5		1250 00	2	22	537	27
Marion.....	60	68	Yes..	Yes..	9		1250 00	1	14	298	7
Marshall.....	215	225	No..	No..	2		1250 00	7	22	542	88
Mills.....	70	70	Yes..	No..	2		1250 00				
Mitchell.....	124	180	Yes..	No..	24		1250 00	5	25	521	51
Monona.....	133	175	Yes..	Yes..	5	1	1250 00				
Monroe.....	94	94	No..	Yes..	8	2	1250 00				
Montgomery.....	125	150	Yes..	No..	4		1250 00				
Muscatine.....	88	176	Yes..	No..	8		1250 00	4	11	460	81
O'Brien.....	146	232	Yes..	No..			1250 00	1	2	94	17
Osceola.....	90	120	Yes..	Yes..	10		1250 00	4	7	250	6
Page.....	122	192	Yes..	No..	9		1250 00	2	38	1018	75
Palo Alto.....	72	75	Yes..	Yes..	9		1250 00	1	9	287	4
Plymouth.....	127	132	Yes..	Yes..	9		1250 00	6	24	805	7
Pocahontas.....	91	93	Yes..	No..	1		1250 00				
Polk.....	85	109	No..	No..	12	2	1500 00	10	258	6151	781
Pottawattamie.....	125	170	No..	No..	9	2	1800 00	6	30	1118	50
Poweshiek.....	78	78	No..	No..	18		1250 00	1	40	530	56
Ringgold.....	68		Yes..	Yes..	8		1250 00				
Sac.....	74	85	Yes..	No..	2		1500 00	1	8	160	2
Scott.....	121	140	Yes..	No..	8		1490 00	12	66	1545	102
Shelby.....	100	800	Yes..	Yes..	100	1	1250 00				
Sioux.....	80	82	Yes..	No..	8		1250 00	6	22	501	41
Story.....	90	98	Yes..	Yes..	14		1250 00	1	95	1412	123
Tama.....	102	180	No..	Yes..	20	1	1250 00	8	19	488	14
Taylor.....	57	67	Yes..	No..	6	1	1250 50				
Union.....	122	181	Yes..	Yes..	5		1250 00	1	4	268	
Van Buren.....	9	9	Yes..	Yes..	1	1	1250 00				
Wapello.....	74	78	No..	No..			1226 00	8	18	519	100
Warren.....	115	180	Yes..	Yes..	8		1250 00	1	84	779	87
Washington.....	85	87	No..	Yes..	1		1250 00	4	18	420	53
Wayne.....	109	175	Yes..	Yes..	6		1250 00				
Webster.....	121	189	Yes..	No..	2		1250 00	8	85	948	91
Winnebago.....	92	120	Yes..	No..	2		1250 00	1	8	126	18
Winneshiek.....	85	108	No..	Yes..	5	1	1250 00	9	58	1741	284
Woodbury.....	121	142	Yes..	Yes..	8		1532 50	7	38	2150	166
Worth.....	102	182	Yes..	Yes..	4		1250 00				
Wright.....	201	296	Yes..	Yes..	56		1250 00	1	6	140	5
Total.....	9452	11465			800	81	1272 62	289	1988	50534	4190

## ABSTRACT [D]—CONTINUED.

## SUMMARY OF SUPERINTENDENTS' WORK, 1904.

COUNTIES.	Schoolrooms.	Separate visits to schools.	Teachers necessary.	Applicants examined.	Certificates granted.	COUNTIES.	Schoolrooms.	Separate visits to schools.	Teachers necessary.	Applicants examined.	Certificates granted.
Adair.....	165	96	165	311	277	Jones.....	182	75	186	271	204
Adams.....	138	60	138	276	222	Lee.....	205	90	216	251	245
Allamakee.....	156	87	156	260	216	Linn.....	400	142	400	486	370
Appanoose.....	194	30	205	335	276	Louisa.....	116	97	123	202	163
Audubon.....	128	53	132	250	214	Lucas.....	127	84	130	223	188
Benton.....	228	127	238	282	235	Lyon.....	168	64	168	179	174
Black Hawk.....	246	30	268	327	243	Madison.....	174	117	175	325	259
Boone.....	224	90	233	310	290	Mahaaka.....	226	75	235	443	359
Bremer.....	139	132	139	203	184	Marion.....	201	93	201	413	216
Buchanan.....	193	100	196	256	248	Marshall.....	239	225	240	371	285
Buena Vista.....	176	109	178	204	180	Mills.....	132	70	132	175	147
Butler.....	183	190	185	262	229	Mitchell.....	189	180	199	174	154
Calhoun.....	184	136	198	314	279	Monona.....	192	175	195	251	213
Carroll.....	187	50	182	242	183	Monroe.....	144	94	148	288	178
Cass.....	197	197	197	331	266	Montgomery.....	156	150	165	208	199
Cedar.....	179	70	188	232	220	Muscatine.....	186	176	186	220	214
Cerr Gordo.....	206	212	212	356	278	O'Brien.....	188	232	192	276	263
Cherokee.....	174	200	182	280	219	Osceola.....	113	120	114	171	141
Chickasaw.....	147	90	150	218	183	Page.....	192	192	195	315	243
Clarke.....	128	131	131	236	196	Palo Alto.....	155	75	171	248	169
Clay.....	153	153	161	248	230	Plymouth.....	222	132	222	357	222
Clayton.....	229	190	234	346	205	Pocahontas.....	175	91	174	247	180
Clinton.....	297	219	331	443	389	Polk.....	478	169	605	656	570
Crawford.....	219	114	227	396	327	Pottawattamie.....	412	170	456	546	439
Dallas.....	216	176	216	336	316	Poweshiek.....	191	78	196	294	230
Davis.....	126	125	125	169	147	Ringgold.....	165	63	168	323	240
Decatur.....	159	70	166	264	246	Sac.....	179	85	186	318	262
Delaware.....	173	85	173	199	160	Scott.....	297	140	332	478	364
Des Moines.....	218	46	219	227	217	Shelby.....	181	300	181	239	196
Dickinson.....	98	104	105	149	123	Sioux.....	237	82	238	337	295
Dubuque.....	253	163	253	319	304	Story.....	213	98	202	328	302
Emmet.....	107	332	110	168	141	Tama.....	330	130	241	331	262
Fayette.....	248	75	248	342	271	Taylor.....	171	67	172	293	212
Floyd.....	173	177	174	261	214	Union.....	171	181	171	206	196
Franklin.....	168	110	170	280	307	Van Buren.....	149	9	150	219	206
Fremont.....	172	148	276	243	226	Wapello.....	213	78	251	416	340
Greene.....	174	85	185	276	207	Warren.....	177	130	182	252	243
Grundy.....	150	60	156	183	153	Washington.....	171	87	184	345	298
Guthrie.....	199	45	201	313	292	Wayne.....	165	175	169	279	272
Hamilton.....	184	112	187	285	296	Webster.....	257	139	290	563	294
Hancock.....	161	146	167	298	250	Winnebago.....	122	120	122	217	202
Hardin.....	206	178	212	331	273	Winneshiek.....	180	108	188	372	225
Harrison.....	214	225	224	189	189	Woodbury.....	404	142	404	304	264
Henry.....	140	50	160	260	212	Worth.....	109	182	109	125	105
Howard.....	129	148	132	214	193	Wright.....	189	296	208	287	265
Humboldt.....	144	174	144	229	191	Total.....	18950	11465	19717	23262	23714
Ida.....	123	205	137	153	150						
Iowa.....	179	160	190	284	254						
Jackson.....	200	61	202	228	221						
Jasper.....	248	100	248	484	305						
Jefferson.....	125	152	126	235	208						
Johnson.....	231	162	238	355	343						

## ABSTRACT [D]—CONTINUED.

## SUMMARY OF SUPERINTENDENTS' WORK, 1904.

COUNTIES.	New schoolhouses.	Whole number.	Good.	Fair.	Poor.	Without suitable and separate outbuildings for each sex.	Schoolhouses provided with flags.	COUNTIES.	New schoolhouses.	Whole number.	Good.	Fair.	Poor.	Without suitable and separate outbuildings for each sex.	Schoolhouses provided with flags.
Adair.....	6	146	85	58	3	.....	75	Jones.....	2	139	60	70	9	20	95
Adams.....	1	112	91	15	6	.....	100	Keokuk.....	1	147	95	43	9	.....	80
Allamakee.....	1	182	99	31	2	4	74	Kossuth.....	3	228	.....	228	.....	.....	.....
Appanoose.....	2	138	25	77	36	.....	14	Lee.....	2	125	35	75	15	12	44
Andubon.....	1	111	91	12	8	.....	46	Linn.....	2	208	170	29	4	.....	124
Benton.....	2	187	134	49	4	15	99	Louisa.....	3	90	60	24	6	9	49
Black Hawk.....	1	154	50	61	43	20	37	Lucas.....	1	99	85	26	8	.....	41
Boone.....	1	157	106	48	3	.....	149	Lyon.....	2	136	66	52	18	5	24
Bremer.....	1	112	92	14	6	2	63	Madison.....	1	143	60	40	43	.....	25
Buchanan.....	3	150	100	47	8	20	20	Mahaska.....	3	161	25	96	40	.....	75
Buena Vista.....	1	139	25	101	13	15	40	Marion.....	5	153	55	78	20	5	30
Butler.....	1	148	78	49	21	.....	.....	Marshall.....	1	156	76	50	30	.....	50
Calhoun.....	4	149	60	74	15	5	86	Mills.....	1	92	18	74	.....	.....	13
Carroll.....	2	146	54	38	24	.....	130	Mitchell.....	1	106	53	24	26	.....	52
Cass.....	3	153	75	68	10	.....	15	Monona.....	4	153	123	22	8	2	41
Cedar.....	4	145	108	31	6	15	31	Monroe.....	2	105	31	53	21	70	10
Cerro Gordo.....	3	148	98	48	7	8	100	Montgomery	1	113	21	84	8	.....	100
Cherokee.....	4	144	68	66	10	.....	72	Muscatine.....	1	105	25	54	26	1	105
Chickasaw.....	1	119	101	17	1	2	80	O'Brien.....	1	141	75	61	5	.....	141
Clarke.....	1	108	50	35	23	.....	16	Osceola.....	3	94	21	70	3	5	75
Clay.....	1	132	101	31	.....	.....	34	Page.....	1	139	133	4	2	.....	136
Clayton.....	3	181	158	20	3	.....	25	Palo Alto.....	1	133	104	22	7	.....	.....
Clinton.....	3	188	116	57	13	3	153	Plymouth.....	1	181	24	162	5	.....	22
Crawford.....	3	179	100	60	19	10	25	Pocahontas.....	1	144	118	19	7	3	71
Dallas.....	3	158	120	30	8	.....	65	Polk.....	3	193	115	63	15	2	.....
Davis.....	1	104	44	38	22	4	7	Pot'wat'mie.	7	257	201	50	6	5	250
Decatur.....	4	124	41	80	3	6	3	Poweshiek.....	3	148	.....	148	.....	.....	58
Delaware.....	2	145	128	15	2	3	120	Ringgold.....	3	134	41	78	15	.....	51
Des Moines.....	2	99	76	18	10	.....	60	Sac.....	4	145	98	32	20	10	12
Dickinson.....	1	79	64	8	7	3	.....	Scott.....	2	127	105	20	2	1	127
Dubuque.....	1	151	125	18	8	4	85	Shelby.....	1	146	100	26	20	.....	146
Emmet.....	4	86	64	12	10	2	25	Sioux.....	2	188	100	80	8	12	10
Fayette.....	3	190	85	100	5	2	120	Story.....	4	151	74	45	32	29	98
Floyd.....	1	124	65	46	13	10	90	Tama.....	5	183	120	41	22	.....	100
Franklin.....	2	144	120	12	12	.....	43	Taylor.....	3	131	99	21	11	.....	60
Fremont.....	1	128	98	20	10	.....	24	Union.....	4	122	52	68	2	.....	52
Greene.....	2	145	35	100	10	.....	100	Van Buren.....	1	116	35	76	5	10	53
Grundy.....	1	128	20	94	14	35	91	Wapello.....	1	114	98	15	3	2	68
Guthrie.....	1	154	52	80	22	.....	27	Warren.....	7	144	77	47	20	15	24
Hamilton.....	3	146	77	41	28	14	68	Washington.....	1	138	40	75	23	9	100
Hancock.....	2	136	116	15	5	1	45	Wayne.....	1	130	97	22	11	6	63
Hardin.....	2	149	75	44	30	.....	100	Webster.....	2	189	74	89	26	18	96
Harrison.....	6	160	108	54	.....	.....	100	Winnebago.....	1	94	50	34	10	10	16
Henry.....	3	109	73	34	2	.....	65	Winneshiek.....	1	149	93	50	6	.....	.....
Howard.....	1	106	68	32	6	.....	2	Woodbury.....	1	217	82	125	10	10	100
Humboldt.....	1	112	13	99	.....	.....	83	Worth.....	1	97	70	15	12	6	78
Ia.....	1	106	80	70	6	.....	35	Wright.....	1	141	40	88	13	.....	.....
Iowa.....	1	142	67	50	25	1	77	Total.....	189	13956	7591	5177	1188	495	6039
Jackson.....	2	154	60	82	12	.....	150								
Jasper.....	6	191	111	60	20	.....	77								
Jefferson.....	1	100	40	55	5	10	70								
Johnson.....	1	170	166	2	2	.....	2								

## ABSTRACT [E]—

## TEACHERS' .

COUNTIES.	WHERE HELD.	SESSIONS.			TEACHERS IN AT- TENDANCE.			
		Commencing.	Con- tin'g weeks.	Sessions Daily.	Males.	Females.	Total.	Graduates.
Adair .....	Greenfield .....	August 1	2	1	12	152	164	.....
Adams .....	Cerning .....	June 20	2	1	18	180	148	.....
Allamakee .....	Waukon .....	August 1	2	2	12	179	191	.....
Appanoose .....	Centerville. ? .....	August 8	2	2	41	182	223	.....
Audubon .....	Audubon .....	July 11	2	1	6	128	184	.....
Benton .....	Vinton .....	August 1	1	2	38	246	270	.....
Black Hawk .....	Waterloo .....	August 15	2	2	13	174	196	.....
Boone .....	Boone .....	August 15	2	2	23	197	220	.....
Bremner .....	Waverly .....	July 11	2	2	6	121	137	.....
Buchanan .....	Independence .....	July 25	1	4	14	162	176	.....
Buena Vista .....	Storm Lake .....	August 1	2	2	6	170	176	.....
Butler .....	Clarkeville .....	August 8	2	2	26	178	198	.....
Calhoun .....	Rockwell City .....	August 6	1	2	9	166	175	.....
Carroll .....	Carroll .....	June 20	2	2	17	199	216	.....
Cass .....	Atlantic .....	June 20	2	1	5	185	190	.....
Cedar .....	Tipton .....	June 6	2	2	15	153	168	.....
Cerro Gordo .....	Mason City .....	August 15	2	2	17	223	240	.....
Cherokee .....	Cherokee .....	June 20	2	2	13	208	216	.....
Chickasaw .....	New Hampton .....	July 25	2	2	6	138	189	.....
Clarke .....	Osceola .....	July 11	2	1	20	107	127	.....
Clay .....	Spencer .....	July 18	2	2	4	124	128	.....
Clayton .....	Elkader .....	August 1	2	2	29	212	241	.....
Clinton .....	Clinton .....	August 22	1	2	13	816	331	.....
Crawford .....	Denison .....	August 8	2	2	7	212	219	.....
Dallas .....	Adel .....	August 8	1	1	39	210	249	.....
Davis .....	Bloomfield .....	August 18	2	2	45	96	141	.....
Decatur .....	Leon .....	June 20	2	2	24	122	146	.....
Delaware .....	Manchester .....	March 28	1	1	2	136	138	.....
Des Moines .....	Burlington .....	June 20	2	2	17	170	187	.....
Dickinson .....	Spirit Lake .....	August 15	2	2	8	91	99	.....
Dubuque .....	Dubuque .....	August 22	2	2	8	292	300	.....
Emmet .....	Estherville .....	August 22	1	2	8	107	115	.....
Fayette .....	West Union .....	August 1	2	2	22	184	206	.....
Floyd .....	Charles City .....	June 18	2	2	4	151	155	.....
Franklin .....	Hampton .....	July 19	2	2	16	156	172	.....
Fremont .....	Sidney .....	July 18	2	2	18	120	133	.....
Greene .....	Jefferson .....	June 20	2	2	10	182	143	.....
Grundy .....	Grundy Center .....	August 15	2	2	18	121	134	.....
Guthrie .....	Guthrie Center .....	August 1	2	2	22	158	180	.....
Hamilton .....	Webster City .....	July 11	2	2	23	184	207	.....
Hancock .....	Britt .....	August 15	1	3	18	141	154	.....
Hardin .....	Eldora .....	August 8	2	2	24	188	212	8
Harrison .....	Woodbine .....	August 1	1	1	7	130	137	.....
Henry .....	Mt. Pleasant .....	June 20	2	2	12	148	160	1
Howard .....	Cresco .....	March 28	2	2	13	124	136	.....
Humboldt .....	Humboldt .....	August 1	2	2	6	167	168	.....
Ida .....	Ida Grove .....	March 24	2	2	10	127	137	.....
Iowa .....	Marengo .....	July 18	2	2	22	184	208	.....
Jackson .....	Maquoketa .....	August 15	1	2	9	151	160	.....
Jasper .....	Newton .....	August 1	2	2	23	265	298	.....

## REPORTS FOR 1904.

## NORMAL INSTITUTE.

## INSTITUTE FUND.

RECEIPTS.					Total.	EXPENDITURES.			
On hand at last report.	Examination fees.	Registration fees.	State appropriation.	County appropriation and sundries.		Instruction and lectures.	Incidentals.	Unexpended.	
\$ 20	\$ 361	\$ 164	\$ 50	.....	\$ 575 20	\$ 515 00	\$ 20 00	\$ 40 30	
83 48	811	148	50	.....	587 48	415 00	.....	173 48	
219 48	267	191	50	.....	727 48	370 00	65 48	292 00	
104 50	367	228	50	.....	784 50	494 00	84 00	156 50	
38 86	274	184	50	.....	400 85	385 00	53 75	58 10	
134 05	332	379	50	9 00	794 05	408 00	67 55	318 50	
290 79	368	186	50	.....	899 79	538 00	97 86	254 48	
5 21	368	220	50	94 04	785 25	648 25	80 00	7 00	
.....	235	127	50	50 89	463 89	405 00	87 89	.....	
139 43	326	176	50	.....	661 48	590 00	.....	111 48	
6 87	243	176	50	.....	475 87	332 50	55 20	97 87	
121 00	344	196	50	20 00	731 00	670 00	34 80	26 70	
138 58	364	175	50	.....	727 58	445 50	82 08	300 08	
42 19	308	316	50	14 00	628 19	474 25	151 95	1 99	
125 50	398	190	50	.....	752 50	555 00	45 00	152 50	
578 98	272	168	50	.....	1066 98	610 00	40 00	416 98	
20 43	397	340	50	.....	707 42	605 00	7 50	4 92	
948 47	311	216	50	.....	925 47	527 28	6 50	391 69	
98	240	189	50	.....	429 98	415 00	.....	14 98	
17 07	250	127	50	.....	444 07	305 00	43 25	95 82	
59 99	236	126	50	.....	568 99	430 00	25 00	108 99	
783 94	369	241	50	.....	1413 96	630 00	123 13	660 83	
244 74	470	381	50	9 00	1104 74	671 87	101 25	381 69	
120 08	420	219	50	50	809 58	606 72	81 80	123 56	
1 06	368	249	50	1 00	669 68	597 00	55 00	17 68	
10 04	187	141	50	47 00	435 04	398 00	33 00	9 04	
17 30	296	146	50	12 20	520 50	505 00	15 50	.....	
14 68	219	188	50	.....	421 68	318 50	5 00	98 18	
109 07	244	187	50	.....	590 07	398 50	70 40	126 77	
2 59	172	99	50	.....	323 59	300 00	13 55	10 24	
55	332	300	50	.....	663 55	640 00	41 75	80	
18 76	196	115	50	.....	376 76	337 50	38 50	10 76	
.....	376	306	50	.....	632 00	516 96	22 00	96 04	
79 40	398	155	50	.....	577 40	375 00	25 00	177 40	
188 12	296	172	50	.....	706 12	525 00	54 06	127 07	
106 96	370	133	50	.....	559 96	447 25	13 50	99 21	
188 10	301	142	50	.....	676 10	468 00	35 00	125 10	
105 99	311	134	50	.....	500 99	447 00	52 75	94	
322 50	371	180	50	.....	923 50	507 75	55 50	350 45	
27 00	297	207	50	.....	581 00	503 50	.....	77 50	
165 60	331	154	50	.....	700 60	448 50	38 50	213 60	
221 00	359	212	50	.....	845 00	545 00	75 00	224 00	
265 44	317	187	50	.....	789 44	410 61	71 80	307 08	
.....	278	160	50	118 89	601 89	525 00	76 89	.....	
82 84	355	135	50	67 20	588 84	448 25	38 75	63 84	
178 84	289	168	50	.....	630 84	406 76	26 22	196 86	
119 00	179	137	50	185 00	670 00	530 00	20 00	180 00	
10 99	315	206	50	.....	581 99	540 00	30 00	11 99	
.....	248	160	50	.....	458 00	382 25	40 50	35 25	
8 80	315	236	50	.....	661 80	730 00	100 85	30 45	

# ABSTRACT [E] TEACHERS'

COUNTIES.	WHERE HELD.	SESSIONS.			TEACHERS IN ATTENDANCE.			
		Commencing.	Cont'g weeks.	Sessions Daily.	Males.	Females.	Total.	Graduates.
Jefferson .....	Fairfield .....	June	20	2 2	18	196	149	2
Johnson .....	Iowa City .....	July	18	2 2	11	204	215	9
Jones .....	Anamosa .....	July	18	2 2	8	161	169	...
Keokuk .....	Signourney .....	July	25	2 2	38	195	238	10
Kossuth .....	Algona .....	July	11	2 2	14	232	246	...
Lee .....	Keokuk .....	August	8	1 2	15	147	162	...
Linn .....	Marion .....	August	15	1 2	30	435	471	...
Louisa .....	Wapello .....	June	20	2 2	32	118	150	...
Lucas .....	Chariton .....	July	25	2 1	11	118	129	...
Lyon .....	Rock Rapids .....	August	1	2 2	13	111	124	...
Madison .....	Winterset .....	August	15	2 2	16	176	192	...
Mahaska .....	Oskaloosa .....	August	1	2 2	18	208	226	...
Marion .....	Knoxville .....	July	18	8 2	23	141	164	15
Marshall .....	Marshalltown .....	{ Mar. 28	8	2	23	230	253	...
Mills .....	Glenwood .....	July	25	2 2	11	129	140	...
Mitchell .....	Osage .....	July	18	2 2	5	109	114	...
Monona .....	Onawa .....	August	1	1 2	8	179	187	...
Monroe .....	Albia .....	July	25	2 2	9	140	149	...
Montgomery .....	Villisca .....	August	15	2 1	10	144	154	...
Muscatine .....	Muscatine .....	June	20	2 2	7	177	184	...
O'Brien .....	Primghar .....	July	11	2 2	13	152	165	19
Osceola .....	Sibley .....	March	28	2 2	7	101	108	...
Page .....	Shenandoah .....	August	25	1 2	12	155	167	...
Palo Alto .....	Emmetsburg .....	August	1	2 2	11	160	171	...
Plymouth .....	Le Mars .....	June	20	2 2	8	171	179	...
Pocahontas .....	Pocahontas .....	August	8	2 2	7	119	126	...
Polk .....	Des Moines .....	{ Mar. * 31	1	1 2	26	548	574	...
Pottawattamie .....	Council Bluffs .....	June	20	2 2	15	825	840	...
Poweshiek .....	Montezuma .....	July	5	2 2	15	140	155	...
Ringgold .....	Mt. Ayr .....	August	1	2 1	16	171	187	...
Sac .....	Sac City .....	June	20	2 2	10	174	184	...
Scott .....	Davenport .....	March	24	2 2	52	274	326	...
Shelby .....	Harlan .....	August	1	1 2	6	150	156	...
Sioux .....	Orange City .....	July	25	2 2	12	125	147	...
Story .....	Nevada .....	August	15	2 2	30	166	190	1
Tama .....	Toledo .....	March	28	2 2	23	218	241	3
Taylor .....	Bedford .....	...	2	1	6	121	127	...
Union .....	Afton .....	August	1	2 2	11	132	143	...
Van Buren .....	Keosauqua .....	August	1	2 2	21	124	145	...
Wapello .....	Ottumwa .....	June	27	2 2	9	203	212	...
Warren .....	Indianola .....	July	25	1 2	14	135	149	...
Washington .....	Washington .....	June	13	2 2	22	207	229	...
Wayne .....	Corydon .....	July	11	1 2	29	151	180	2
Webster .....	Ft. Dodge .....	April	4	1 2	17	208	223	...
Winnebago .....	Forest City .....	August	27	2 2	10	96	106	...
Winneshek .....	Decorah .....	March	28	2 2	37	186	228	...
Woodbury .....	Sioux City .....	July	11	2 2	8	215	223	...
Worth .....	Northwood .....	August	15	2 2	9	68	77	...
Wright .....	Clarion .....	August	8	2 2	15	181	196	...
Total .....	...	...	2	...	1567	1696	1853	65

\* For three days.

## REPORT FOR 1904.—CONTINUED.

## NORMAL INSTITUTE.

## INSTITUTE FUND.

RECEIPTS.					Total.	EXPENDITURES.		
On hand at last report.	Examination fees.	Registration fees.	State appropriation.	County appropriations and sundries.		Instruction and lectures.	Incidentals.	Unexpended.
\$ 206 61	\$ 258	\$ 140	\$ 50	.....	\$ 688 61	\$ 470 00	\$ 85 00	\$ 188 61
12 89	379	215	50	61 11	718 00	688 00	85 00	.....
45 72	806	109	50	.....	569 72	350 00	70 85	148 87
1 00	420	228	50	.....	704 00	609 00	95 00	.....
831 73	451	246	50	.....	1078 73	782 80	92 00	208 98
123 84	267	102	50	.....	601 84	346 85	46 50	208 49
717 08	802	471	50	.....	1740 08	787 06	98 08	854 87
.....	228	150	50	.....	428 00	315 00	65 85	42 15
5 94	226	129	50	.....	420 94	260 06	7 00	153 94
150 50	308	124	50	.....	582 50	487 50	12 00	88 00
110 62	841	192	50	.....	698 62	425 00	65 25	208 87
45 42	456	226	50	.....	777 42	545 00	160 50	71 98
44 41	888	164	50	.....	594 41	375 00	95 68	128 73
780 25	868	258	50	.....	1481 25	843 00	58 40	558 85
42 17	300	140	50	.....	432 17	367 26	47 48	17 46
94	191	114	50	181 75	487 69	411 00	82 88	44 81
845 00	275	187	50	.....	887 00	491 75	76 10	869 15
78 19	248	149	50	.....	520 19	519 50	.....	7 69
115 79	249	154	50	.....	568 79	497 00	.....	71 79
.....	259	184	50	.....	496 00	389 80	64 51	86 69
87 70	838	165	50	.....	595 70	491 05	26 60	68 65
56 17	194	108	50	60 00	468 17	325 00	102 04	41 13
102 94	840	167	50	.....	659 94	408 50	94 98	162 46
2 00	296	171	50	.....	519 00	450 00	55 00	14 00
186 30	257	176	50	.....	712 20	330 00	87 00	296 20
22 07	807	126	50	.....	508 07	440 00	68 62	2 05
138 29	788	574	50	.....	1520 29	764 98	647 00	108 37
271 58	678	840	50	.....	1839 58	881 00	126 54	881 99
46 20	511	156	50	10 00	571 20	520 69	43 84	1 67
5 64	357	187	50	40 50	640 14	495 00	71 50	78 64
80 70	867	184	50	.....	681 70	496 50	26 40	118 80
422 07	899	826	50	9 30	1196 97	494 25	149 00	618 72
53 00	298	156	50	.....	507 00	478 00	29 00	6 00
158 78	400	147	50	276 10	1028 88	589 49	41 45	137 89
49 50	538	196	50	.....	638 50	420 00	90 85	128 65
114 15	872	241	50	.....	777 15	545 00	77 88	154 88
78 70	865	127	50	71 00	666 70	496 40	.....	168 80
781 65	388	148	50	.....	1207 65	504 50	88 00	630 15
126 02	240	145	50	.....	561 02	381 50	30 15	199 87
218 07	499	212	50	.....	919 07	555 00	88 00	276 07
222 84	279	149	50	.....	700 84	406 00	40 75	255 09
842 44	878	229	50	.....	996 44	605 00	64 75	826 69
29 30	238	180	50	.....	567 80	399 50	43 80	114 00
417 86	409	223	50	.....	1099 88	664 60	44 80	890 28
17 95	255	106	50	.....	426 95	358 00	50 58	18 40
189 39	368	223	50	.....	850 89	517 50	107 80	226 59
8 11	878	228	50	.....	654 11	570 00	72 88	11 78
49 85	147	77	50	.....	322 85	240 00	12 00	71 85
15 25	383	196	50	.....	589 25	515 00	85 65	18 60
\$ 12215 86	\$ 81588	\$ 18638	\$ 4980	\$ 12 2 96	\$ 66564 84	\$ 48007 24	\$ 6071 98	\$ 14895 12

## ABSTRACT [E]

## TEACHERS' NORMAL INSTITUTES.

COUNTIES.	CONDUCTORS.	INSTRUCTORS.
Adair.....	Ella C. Chantry....	Adam Pickett, W. R. Andrews, H. D. Smith, J. C. Hagler, L. N. Gerber, Josephine Knox.
Adams.....	A. B. Lewis.....	J. E. Stout, G. A. Axline, L. W. Fike, J. A. Griffith, F. J. Resler.
Allamakee.....	J. E. Mills.....	C. P. Colgrove, Arthur Wilson, E. J. Hook, Louise Minert, Jennie Hallingby, H. A. Dwelle.
Appanoose.....	F. E. King.....	G. W. Bryan, P. B. Woods, Wm. Selomon, H. E. Laughlin, Oraini V. Swift.
Andubon.....	Arthur Farquhar....	D. P. Repass, F. A. Nims, P. B. Woods, F. P. Hooker, Ella M. Stearns.
Benton.....	C. R. Lowe.....	Grace S. Burt, Blanche Goudy, John Sogard, George H. Betts.
Black Hawk.....	A. T. Hukill.....	L. H. Minkel, Lydia Hinman, C. B. Stein, F. H. Bloodgood, Lura Phillips, Fannie A. Palmer.
Boone.....	R. R. Cobb.....	J. O. King, D. M. Kelly, E. L. Colburn, E. L. Meek, Clara E. Thompson, Effie Shuneman.
Bramer.....	John T. Bemick.....	W. F. Cramer, T. J. Durant, Cap E. Miller, Alice Cary Wilson, Elizabeth Conner.
Buchanan.....	M. J. Goodrich.....	F. H. Bloodgood, Clara M. Travis, Agnes Patterson, Eva L. Owen, Mildred Goodrich, Ruby L. Peck, Ida Hullerman.
Buena Vista.....	J. E. Durkee.....	J. H. O'Donahue, T. B. Norris, Agnes N. Hannum, Alice Wilcox, E. L. Coburn.
Butler.....	Ida F. Leydig.....	G. H. Betts, C. A. Fullerton, J. F. Overmyer, P. F. Voelker, W. H. Bender, J. L. Zwickey, Edith Reid, Maud Summers.
Calhoun.....	W. R. Sandy.....	P. O. Colgrove, Mrs. H. R. Reynolds, G. W. Young, Bertha Cadwell, D. Patten, L. C. Bryan, Theodore Saam.
Carroll.....	W. J. Barloon.....	W. P. Johnson, F. L. Hoffman, O. J. Johnson, Julia Scurry, Alberta Scanlan, A. N. Palmer, F. H. Figert.
Cass.....	J. J. McConnell.....	W. K. Salisbury, D. O. Neifert, W. J. Castell, Frank Lindeman, Anna O. Temple, Effie Shunerman.
Cedar.....	George H. Kellogg....	C. Ray Aurner, E. B. Orone, L. O. Curtis, J. H. Morgan, E. L. Coburn, Elizabeth Bain, Nellie Smith.
Cerro Gordo.....	P. O. Cole.....	S. S. Wyand, H. H. Holmes, Mary G. Long, Harriet Garton, Clara Klinefelter, D. A. Thornburg, W. H. Bender.
Cherokee.....	Agnes J. Robertson....	W. O. Riddell, G. E. Finch, A. V. Storm, F. H. Bloodgood, Maud Summers, Margaret Smith.
Chickasaw.....	W. P. Johnson.....	C. L. Woodfield, E. O. Hill, T. J. Wormley, F. A. Sobentz, Ida Fitzsimmons.
Clarke.....	A. M. M. Dornon.....	A. E. Parsons, Mrs. Ingletta, F. Ware, Miss Katherine Davis.
Clay.....	H. F. Fillmore.....	A. H. Avery, A. P. Heald, C. J. Boyington, E. G. Clarke, Mary Riley.
Clayton.....	C. J. Adam.....	S. H. Sheakley, G. E. Finch, F. H. Bloodgood, J. N. Dahm, Chas. F. Pye, Alice Kingsley.
Clinton.....	George E. Farrell.....	John A. Keith, W. I. Orane, Anna Donovan, Alice Rogers, B. J. Heffin.
Crawford.....	F. L. Hoffman.....	W. C. Van Ness, J. E. Bagge, Zoe C. Patterson, J. H. Beveridge, W. J. Barloon, W. B. Thornburg, Charlotte Sweeney, H. H. Savage.
Dallas.....	R. F. Wood.....	C. F. Harrows, W. S. Athearn, Alice Hopper, W. H. Gemmill, Pearl Britton, R. O. Barrett, E. J. Pollock, J. W. Graham.
Davis.....	W. S. Athearn.....	Will Fortune, C. N. Spicer, Wilbur York, Miss Charlotte Sweeney.
Decatur.....	Eli Hutchinson.....	R. A. Harkness, F. P. Reed, J. R. Cash, A. L. Lyon, J. M. Howell, J. M. Pierce, Miss Mabel Horner.
Delaware.....	George H. Betts.....	C. B. Stein, Miss Dolly Twitchell.
Des Moines.....	Howard A. Mathews....	A. T. Hukill, T. M. O'evenger, F. M. Fultz, Anna L. Robbins, W. L. Sheets.

## ABSTRACT [E]—CONTINUED.

COUNTIES.	CONDUCTORS.	INSTRUCTORS.
Dickinson.....	W. F. Davidson....	Wm. Bell, H. H. Savage, M. R. Hassel, O. J. Bayington, Mrs. Evangeline Robinson.
Dubuque.....	P. J. Schroeder....	A. E. Winship, Alice Hopper, A. A. Weaver, G. W. Fields, J. M. Walsh, T. M. Irish, F. T. Olds, L. L. Lightcap.
Emmet.....	W. A. Willis.....	W. V. Howard, A. P. Hargrave, A. V. Storm, W. H. Bender, Ida A. Davis.
Fayette.....	H. L. Adams.....	A. E. Bennett, E. L. Coffeen, J. E. Stout, Margaret McCauley, Dolly Twitcheil.
Floyd.....	Frederick Schaub..	F. E. Hirsch, W. F. Finke, W. G. Babb, A. L. Haines, E. F. Fisher, Elizabeth Carmicheal, Mary J. Crowell.
Franklin.....	S. E. Campbell....	D. A. Thornburg, A. T. Hukill, O. W. Maxwell, Margaret L. Weber, Clara M. Klinefelter.
Fremont.....	Mattie Lee A. Lair..	F. O. Ensign, A. C. Fuller, G. U. Gordon, W. B. Gregg, Frances Wright, I. E. Clayton, Ellen Wing.
Greene.....	A. J. Oblinger.....	Anna L. Wertz, Bruce Francis, H. A. Glackemeyer, Emma Ankeny, F. E. Palmer.
Grundy.....	J. D. Adams.....	J. E. Stout, W. D. Wells, O. L. Love, Hattie Moore Mitchell.
Guthrie.....	M. P. Kenworthy..	F. E. Palmer, A. A. Taylor, B. E. Finley, M. F. Moine, Miss Kate McGuire, Miss Edna Bonebroke.
Hamilton.....	L. N. Gerber.....	J. C. Hagler, Elizabeth Bain, Ella Chantry, J. M. Holaday, J. T. Bradshaw, E. R. Lee.
Hancock.....	A. M. Deyoe.....	C. P. Colgrove, C. C. Nutting, B. W. Headley, W. J. Jerome, Bertha Cadwell, May G. Long, F. C. Butler.
Hardin.....	Elia B. Chassell....	A. O. Newell, Milo Hunt, A. J. Cavana, Miss Mae J. Evans, Miss Della Bishop, Miss Julia Sourry, Miss Macha Vance.
Harrison.....	D. E. Brainard....	C. E. Blodgett, J. H. Beveridge, H. E. Wheeler, O. W. Stone, Gertrude Whiting.
Henry.....	Annie E. Packer...	C. W. Orulshank, David Williams, N. E. Johnson, Jesse Benjamin, P. O. Hayden, Eugenia Kimball, Amanda Kidder.
Howard.....	G. A. Oliver.....	G. E. Finch, L. E. A. Ling, A. R. McCook, Mrs. O. J. Laylander, M. Alda Tate, Harriet Carpenter.
Humboldt.....	Clarence Messer....	C. S. Cory, Mrs. D. F. Coyle, Ida Fitzsimmons.
Ida.....	J. O. Hagler.....	Maud Summers, Anna Wertz, W. B. Munson, W. F. Barr, L. N. Gerber, Walter Athearn.
Iowa.....	H. T. Ports.....	A. E. Winship, O. T. Bright, W. H. Bender, C. B. Stein, O. H. Carson, Bruce Francis, Mrs. Frances E. Clarke, Mrs. Hattie M. Mitchell.
Jackson.....	W. F. Barr.....	M. Jaynes, Alice K. Bovard, Alice C. Wilson, Cernelia Collins.
Jasper.....	J. E. Roberts.....	W. N. Clifford, W. O. Riddell, E. J. H. Beard, Kate Mulhern, Hattie Moore Mitchell, Mrs. T. M. Rodgers.
Jefferson.....	Anna White.....	W. N. Clifford, S. A. Power, Cora Ball, Hattie Moore Mitchell.
Johnson.....	W. A. Willis.....	A. G. Smith, O. E. Smith, F. L. Mahannah, R. W. Sies, Mrs. Alice B. Davies, Miss Laura Graham.
Jones.....	Clifford B. Paul....	Orville T. Bright, O. E. Buckley, J. E. Cameron, Myrtle Le Compte, Julia Sourry.
Keokuk.....	Cap E. Miller.....	A. E. Winship, Mrs. Alice Mendenhall, T. M. Clevenger, O. E. Humphries, Mrs. H. M. Mitchell, O. T. Bright, Manning Jaynes, Mrs. Retta Minster.
Kossuth.....	C. H. Belknap.....	A. E. Bennett, H. C. Jones, H. L. Coffeen, O. W. Weeks, Josephine Burling, Charlotte Sweeney.
Lee.....	E. C. Lynn.....	W. L. Barrett, O. W. Cruikshank, G. W. Walters, P. C. Hayden, Alice C. Wilson, Minnie Dee Wright.
Linn.....	J. E. Vance.....	W. I. Crane, Emma Beenk, G. E. Finch, Hattie Eggleston, J. E. Cameron, J. E. Bagley.
Louis.....	C. E. Wallace.....	A. M. M. Dornon, L. T. Hill, J. W. McOnloch, Eva L. Owen, Lillian Bridgeford.
Lucas.....	Laura Fitch.....	W. F. Chevalier, W. S. Rowley, Minnie Dungan, Della Courtelyou.
Lyon.....	W. S. Wilson.....	J. L. Miehler, C. R. Scroggie, Ida Fesenbeck, Mattie L. Larkin, Ethel G. Pike.
Madison.....	T. H. Stone.....	O. E. Smith, C. E. Douglas, W. H. Monroe, H. D. Smith, Effie Turner.

## ABSTRACT [E]—CONTINUED.

COUNTIES.	CONDUCTORS.	INSTRUCTORS.
Mahaaka .....	J. P. Dodds .....	Maud Summers, G. H. Bigelow, Anna P. Tucker, Wm. Badelbaugh, J. E. Cameron, L. F. Bonouett, L. O. Hummel.
Marion .....	W. H. Lucas .....	S. G. Richards, W. C. Farmer, Martha Firth, Zoe Patterson.
Marshall .....	Mary E. Hostetler.	Frank W. Darling, E. U. Graff, W. I. Crane, Alice B. Lincoln, Harriet Garton, W. N. Clifford, Nettie A. Sawyer.
Mills .....	W. M. Moore .....	L. D. Salisbury, J. D. Beld, F. C. Ensign, Fannie O. Ames, Ellen J. Wing, Allie Cambella.
Mitchell .....	Jay A. Lapham .....	O. P. Colgrove, G. W. Sawyer, John P. Lund, Fred Schaub, H. A. Longley, Dorothy Nedland, Maggie Tobin.
Monona .....	F. E. Lark .....	C. E. Shelton, I. W. Howerth, N. V. O'Shea, J. B. Bagley, Eva Kendall.
Monroe .....	R. B. Spencer .....	H. C. Hollingsworth, G. W. Walters, A. F. Ewers, Wm. Solomon, Maisey Schreiner, N. Florence Littlefield.
Montgomery .....	Mabel G. Hanna .....	G. S. Dick, E. B. Wickarham, D. O. Nettford, W. B. Gregg, Nellie Barton, Stella Woodford.
Muscatine .....	L. G. Focht .....	R. W. Leverich, Linnie Harris, Madge Babbett, Mrs. Emma Luse.
O'Brien .....	Nellie Jones .....	W. N. Clifford, C. E. Scroggie, O. M. Elliott, S. H. Buntley, Emma O. Moulton, Josephine Harwood.
Osceola .....	J. P. McKinley .....	W. A. Athearn, C. E. Scroggie, L. B. Parsons, Charlotte Sweeney, Alberta Scanlon.
Page .....	George H. Colbert .....	Geo. H. Betts, F. C. Ensign, H. E. Wheeler, W. E. Salisbury, Luella Kittle.
Palo Alto .....	H. E. Blackmar .....	H. A. Welty, Chas. B. Stein, I. C. Welty, A. H. Avery, Ethel Rundell.
Plymouth .....	I. C. Hise .....	A. H. Bigelow, S. G. Richards, L. H. Wright, Nettie Snidon.
Pocahontas .....	U. S. Vance .....	F. L. Cassidy, J. J. Raa, Mary Riley, C. Jay Boyington, W. H. Reeber.
Polk .....	Z. C. Thornburg .....	Adda Blakeslee, W. N. Hailman, W. H. Dudley, M. L. Bartlett, C. W. Lyon, W. F. Barr, Alice Hopper.
Pottawattamie .....	O. J. McManus .....	I. W. Howerth, H. E. Blackmar, S. L. Thomas, F. C. Ensign, Georgia Alexander, M. Lucille Porterfield, H. E. Colby, M. E. Crozier, W. J. Flint, W. N. Clifford.
Poweshiek .....	P. A. McMillen .....	D. A. Thornburg, Eugene Henely, C. E. Douglass, Wm. Solomon, Oral Neely, Lura Phillips.
Ringgold .....	Lora L. Richardson .....	W. F. Barr, W. L. Barrett, J. W. Wilkerson, J. D. Cherryholmes, Etta E. Kinsell, Florence Knox.
Sac .....	G. W. Lee .....	H. C. Coe, T. B. Hutton, O. F. Garrett, Elizabeth Platt, Bertha Cadwell.
Scott .....	J. H. Jacobs .....	P. O. Hayden.
Shelby .....	G. A. Luxford .....	G. E. MacLean, W. S. Athearn, W. O. Wilcox, Maude Summers, Margaret Moore, James Seymour, J. J. Louis, Benjamin Boardman.
Sioux .....	A. V. Storm .....	J. L. Zwick, S. W. Mounts, S. T. May, O. W. Herr, Alice C. Wilson, Philip Soulen.
Story .....	I. C. Welty .....	L. B. Carlisle, H. A. Welty, A. B. Alderman, Blanche Gundy, Anna Odland.
Tama .....	D. E. Brown .....	E. J. Hoenshel, E. C. Meredith, Hattie Moore Mitchell, H. B. Shoemaker, J. B. Young, W. G. Martin, W. A. Pyle, J. E. Fleming.
Taylor .....	Frank E. Howard .....	E. E. Kuhn, Jessie Himes, Olde C. Fisher, Mrs. Victoria Faith, Lillian McCracken.
Union .....	Frank M. Abbott .....	W. I. Crane, I. W. Howerth, J. E. McComb, F. E. Howard, Lura Randolph, Lillian L. Bridgeford, A. T. S. Owen, S. Marion Becker, Anna L. West.
Van Buren .....	David Williams .....	Elizabeth Bain, H. H. Holmes, H. B. Barrows, Julia Mahoney, Mae J. Evans, Calla M. Hand, Lucile Major.
Wapello .....	Emma S. Nye .....	
Warren .....	J. W. Radebaugh .....	O. E. Smith, F. E. Palmer, E. L. Miller, Alexander Emalie, George Eaton, Binnie McKitterick, Dr. Charles E. Shelton.
Washington .....	Cora E. Porter .....	R. E. Crone, R. D. Daugherty, C. B. Stein, Florabel Patterson, Hattie Moore Mitchell.
Wayne .....	L. Maud Elmore .....	W. N. Clifford, W. P. Johnson, W. L. Pugh, Hattie Moore Mitchell, Mrs. M. L. Weber.

## ABSTRACT [E] CONTINUED.

COUNTIES.	CONDUCTORS.	INSTRUCTORS.
Webster . . . . .	A. L. Brown. . . . .	W. N. Hallman, Alice M. Cooley, Frank Darling, Arnold Tompkins, O. T. Bright, E. L. Coburn, O. V. Findlay.
Winnebago . . . .	B. C. Barrett . . . . .	H. O. Bateman, W. H. Whitford, F. O. Smith, Mrs. B. Booth, Mrs. C. L. Prescott.
Winneshiek . . . .	Ellis J. Hook . . . . .	E. L. Coffeen, Ella Treat, H. A. Dwelle, Julia Scurry, Julia Breckemridge, T. I. Gifford, H. C. Johnson.
Woodbury . . . . .	E. A. Brown . . . . .	J. W. Mather, L. H. Harvey, Helen I. Loveland, J. G. Hobson, W. M. Stevens, F. H. Garver, Kate I. Hubbard.
Worth . . . . .	O. E. Gunderson . . . .	H. A. Dwelle, L. J. Reed, J. O. Briggs, Fannie Quaise.
Wright . . . . .	Angus Macdonald..	Laura E. Martin, Jennie Wolcott, E. W. Fellows, J. G. Grundy, Elizabeth Bain, Lura Phillips, F. Teller. . . . .

# STATISTICS OF CITY SCHOOLS. COMPARATIVE SHOWING FOR 1903-1904.

CITIES HAVING A POPULATION OF 8,000 OR MORE BY THE CENSUS OF 1900.

CITIES.	Population, census 1900.	Enumeration, 1904.	Enrollment, 1903-1904.	Attendance, 1903-1904.	Attendance upon enumeration.	Attendance upon enrollment.	Paid all teachers in 1903-1904.	Tuition per month.	Assistant teachers.	Salary per month.	Months taught.	CITY SUPERINTENDENT, 1903-1904.	Salary.
Atlantic.....	5046	1227	1136	857	69	75	\$14512 80	\$1 89	28	.....	9	Carlos M. Cole.....	\$1600
Belle Plaine.....	3293	981	831	657	67	74	8583 35	1 52	20	\$49 00	9	W. J. Dean.....	1250
Boone.....	8880	2794	2148	1705	61	79	28411 49	1 83	59	54 65	9	J. C. King.....	1800
Burlington.....	28201	7329	4300	3452	47	80	67391 45	1 99	119	59 07	9	Francis M. Fultz.....	1750
Cedar Falls.....	5319	1374	992	752	55	75	14690 00	2 46	34	55 00	9	J. M. Kelly.....	1790
Cedar Rapids.....	25656	13469	5707	4532	34	79	8683 37	2 08	160	53 76	9	J. J. McConnell.....	9000
Centerville.....	5256	2078	1585	1253	60	79	17767 45	1 48	.....	.....	9	F. E. King.....	1500
Chariton.....	3989	1236	1080	823	67	76	11107 75	1 49	24	42 00	9	J. B. Morris.....	1350
Charles City.....	4227	1281	913	827	49	69	14828 55	2 63	.....	.....	9	Chas. A. Kent.....	1500
Cherokee.....	3885	1172	982	775	66	79	12953 76	1 86	24	50 47	9	A. V. Storm.....	1700
Clarinda.....	3276	1038	970	721	70	74	10653 00	1 64	22	47 50	9	W. E. Salisbury.....	1300
Clinton.....	22088	6041	3230	2923	43	81	50503 25	2 02	104	50 52	9	O. P. Bostwick.....	2150
Council Bluffs.....	25802	7138	5507	4259	60	77	77358 29	2 01	141	58 95	9	W. N. Clifford.....	2400
Creston.....	7752	2398	1888	1404	59	78	21793 92	1 71	44	56 18	9	O. E. French.....	1500
Davenport.....	35254	12216	7069	5654	46	80	117266 90	2 07	209	62 23	10	J. B. Young.....	2000
Des Moines, W. E.....	62189	14932	8115	6038	40	74	158962 92	2 85	252	70 75	9	S. H. Sheakley.....	3500
Dubuque.....	36297	13280	4600	3595	27	78	76949 10	2 14	.....	.....	10	R. J. Hartung.....	1600
Decorah.....	3246	1089	743	574	53	77	11085 00	2 06	20	44 56	9.5	F. T. Oldt.....	2500
Eagle Grove.....	3557	1149	789	661	58	84	9613 72	1 61	20	56 30	9	E. L. Coffeen.....	1500
Estherville.....	3237	1352	851	784	58	92	12589 96	1 78	23	48 75	9	John G. Grundy.....	1200
Fairfield.....	4689	1301	949	743	57	78	10762 47	1 61	20	45 97	9	Edwin Duckes.....	1450
Fort Dodge.....	12162	3 95	2073	1554	49	75	27676 96	1 99	52	54 96	9	S. A. Power.....	1200
Fort Madison.....	9278	2676	1285	1005	58	78	16546 70	1 57	31	47 39	9	George H. Mullin.....	2000
Glenwood.....	3010	1514	740	485	32	66	8594 97	1 97	18	46 76	9	C. W. Cruikshank.....	1400
Grinnell.....	3860	1360	1136	956	70	84	15045 00	1 70	29	54 48	9	L. H. Maus.....	1200
Independence.....	3656	1059	773	641	61	83	12786 69	1 97	27	46 77	9	D. A. Thornburg.....	1550
Indianola.....	3261	1004	834	701	70	84	10409 20	1 67	20	48 20	9	J. L. Buechle.....	1400
Iowa City.....	7987	2003	1798	1820	66	73	24796 50	1 98	53	55 40	9.5	O. E. Smith.....	1350
Keokuk.....	14641	3844	2191	1803	47	82	35161 08	2 04	61	60 46	9	S. K. Stevenson.....	1500
Knoxville.....	3131	887	874	688	72	73	9212 50	1 54	20	45 97	9	O. W. Weyer.....	1250
Le Mars.....	4146	1488	990	789	53	80	13705 87	1 93	24	48 92	9	S. G. Richards.....	1000
Lyons.....	*	1852	1185	825	45	70	18961 75	1 78	28	50 55	9.5	T. B. Hutton.....	1700
Maquoketa.....	3777	1102	926	759	69	82	9921 22	1 44	28	39 09	9	J. R. Bowman.....	1650
Marion.....	4102	1129	944	736	65	78	12050 44	1 80	23	49 98	9	Aaron Palmer.....	1400
Marshalltown.....	11544	3 85	2737	2052	61	75	31109 16	1 68	69	57 22	9	G. E. Finch.....	2000
Mason City.....	6746	2189	1608	1327	62	68	20312 02	1 70	51	49 87	9	W. I. Crane.....	1600
Mount Valley.....	4010	1112	1065	812	73	77	12441 83	1 70	24	50 63	9	L. D. Ellis.....	1400
Mount Pleasant.....	4100	1029	850	693	62	74	10974 44	1 93	24	46 98	9	J. H. Beveridge.....	1400
Muscatine.....	14073	4607	2900	2252	49	78	38712 71	1 71	73	51 95	10	F. W. Else.....	1100
Newton.....	3682	1200	925	712	59	77	11130 00	2 80	22	44 00	9	W. F. Chevalier.....	1800
Osceola.....	5142	1552	1193	877	57	74	11243 45	1 41	28	50 45	9	E. J. H. Beard.....	1600
Oskaloosa.....	9212	2974	2253	1774	60	79	28907 19	1 80	57	54 80	9	L. B. Moffett.....	1300
Ottumwa.....	18197	5333	3978	3355	63	84	55887 93	1 67	113	43 19	9.5	S. J. Finley.....	1700
Perry.....	3990	1070	1051	847	79	81	11690 07	1 56	22	44 05	9	A. W. Stuart.....	8000
Red Oak.....	4355	1538	1268	1036	67	82	17010 10	1 81	34	49 61	9	J. J. Moser.....	1100
Shenandoah.....	3573	1166	953	768	66	81	11696 25	1 95	24	50 62	9	George S. Dick.....	1600
Sioux City.....	33111	13856	7770	5991	41	73	99500 00	1 54	179	53 63	9	H. E. Wheeler.....	1300
Spencer.....	3095	886	790	575	65	73	11041 60	2 13	22	49 42	9	W. M. Stevens.....	2200
Vinton.....	3499	926	747	555	60	74	9542 25	1 89	18	50 33	9	A. H. Avery.....	1200
Washington.....	4255	1398	1116	891	64	80	19384 50	1 70	27	50 84	9	John Sogard.....	1400
Waterloo, E.....	12540	3150	1692	1216	39	72	27185 00	2 48	55	50 06	9	R. B. Crane.....	1500
Waterloo, W.....	12540	1706	1035	947	53	73	18938 20	1 98	35	50 62	9	F. H. Bloodgood.....	1800
Waverly.....	3177	97	643	506	52	79	8980 00	1 80	17	47 10	9	A. T. Hukill.....	1700
Webster City.....	4618	1325	1174	924	62	70	14285 00	1 96	25	50 16	9	W. F. Cramer.....	1600
Winterset.....	3039	877	776	582	60	75	8375 00	1 60	22	45 91	9	L. H. Ford.....	1800
												P. E. McClenehan.....	1300

\* Included in Clinton.

# STATISTICS OF CITY SYSTEMS. COMPARATIVE SHOWING FOR 1903-1904.

CITIES AND TOWNS IN IOWA HAVING MORE THAN 1,500 AND LESS THAN 3,000 POPULATION BY THE CENSUS OF 1900.

CITIES.	Population, census 1900	Enumeration, 1904.	Enrollment, 1903-1904.	Attendance, 1903-1904.	Attendance upon enumeration.	Attendance upon enrollment.	Paid all teachers in 1903-1904.	Tuition per month.	Asst-tant teachers.	Salary per month.	Months taught.	CITY SUPERINTENDENT, 1903-1904.	Salary.	
Albia.....	2889	900	896	698	72	83	\$9855	48	\$1 60	22	\$44 81	9	H. C. Hollingsworth.....	\$1400
Algona.....	2911	1021	914	644	68	71	10002	22	1 57	20	45 55	9	J. F. Overmeyer.....	1200
Ames.....	2422	929	788	648	70	83	11779	10	2 16	24	52 72	9	C. R. Scroggie.....	1500
Anamosa.....	2891	945	711	526	56	74	7248	91	1 58	15	45 00	9	C. E. Buckley.....	1200
Audubon.....	1986	585	490	381	46	76	6375	00	1 56	11	49 00	9	H. P. Hooker.....	1200
Avoca.....	1627	607	464	350	58	75	7004	97	2 23	18	49 61	9	M. E. Crozier.....	1200
Bedford.....	1977	585	588	470	80	81	7687	58	2 09	15	53 57	9	Frank E. Howard.....	1200
Bellevue.....	1607	567	254	195	84	77	3442	50	1 96	7	41 50	9	B. S. Asquith.....	.....
Bloomfield.....	2105	569	171	140	81	82	1480	00	1 68	12	40 42	6	J. F. Treasure.....	600
Britt.....	1840	438	388	311	64	80	5676	49	2 08	12	55 74	9	B. W. Hoadley.....	1000
Carroll.....	2882	1221	582	445	86	76	9155	00	2 28	17	50 62	9	W. P. Johnson.....	1400
Clear Lake.....	1706	506	419	354	70	84	5096	00	1 57	10	48 50	9	E. G. Bailey.....	1000
Colfax.....	2038	815	689	513	68	80	7092	50	1 53	14	47 48	9	J. L. Mähler.....	.....
Corning.....	2145	662	604	500	76	76	8699	97	1 97	18	45 83	9	G. A. Axline.....	1250
Cresco.....	2908	829	620	486	59	78	10574	65	2 21	17	47 79	9	L. E. A. Ling.....	1800
Denison.....	2771	1808	749	601	46	80	10177	54	1 85	21	50 71	9	H. H. Savage.....	1500
Elkton.....	1850	556	490	356	64	77	4684	75	1 54	12	89 91	9	C. E. Akers.....	945
Elkora.....	2283	665	546	412	62	75	7119	92	1 68	13	50 17	9	Milo Hunt.....	1250
Emmettsburg.....	2861	742	544	415	56	76	7458	75	2 00	16	47 00	9	H. E. Blackmar.....	1800
Forest City.....	1758	547	514	399	78	78	7151	00	1 99	14	.....	9	H. O. Bateman.....	1250
Guttenburg.....	1929	628	282	211	84	76	4217	14	1 50	8	45 62	10	Charles F. Fye.....	900
Hamburg.....	2079	587	536	410	72	76	6581	97	1 79	13	48 19	9	J. E. Clayton.....	1200
Hampton.....	2727	751	616	495	66	82	9200	05	2 06	17	51 04	9	O. W. Maxwell.....	1400
Harlan.....	2422	887	737	645	71	82	9005	00	1 70	20	46 50	9	O. W. Herr.....	1200
Hawarden.....	1810	654	577	445	69	77	7184	97	1 79	14	47 50	9	S. T. May.....	1200
Ida Grove.....	1969	699	558	518	75	78	8465	00	2 88	16	47 19	9	P. F. Volker.....	1400
Iowa Falls.....	2849	975	752	620	64	82	9689	04	1 73	19	50 81	9	Anna L. Burdick.....	1250
Jefferson.....	2901	699	632	512	73	75	8277	50	1 78	18	50 37	9	F. E. Palmer.....	1350
Lake City.....	2708	654	670	517	79	77	7625	00	1 64	16	47 42	9	Theodore Baan.....	1000
Lamoni.....	1840	514	481	351	68	73	4095	00	1 58	11	42 27	9	Hugh S. Buffum.....	810
Leon.....	1905	583	502	398	71	71	4722	49	1 49	10	40 25	9	J. M. Pierce.....	1000
Manchester.....	2687	775	674	506	65	76	7378	98	1 73	20	42 06	9	Amy Boggs.....	1100
Marengo.....	2067	629	532	436	70	82	7362	50	1 97	14	48 72	9.5	C. H. Carson.....	1400
Monticello.....	2104	646	690	446	65	85	6435	00	1 25	14	48 14	9	C. McCracken.....	1200
Mount Ayr.....	1729	552	513	391	71	76	5623	40	1 59	12	48 75	9	Adam Pickett.....	1200
Mount Vernon.....	1629	456	316	240	53	76	4915	07	1 70	8	46 42	9	L. T. Newton.....	1000
Mystic.....	1758	649	545	351	54	69	3502	98	1 11	9	33 00	9	John C. DeMar.....	675
Nevada.....	2472	670	618	475	71	77	7290	50	1 85	16	48 50	9	L. B. Carlisle.....	1500
New Hampton.....	2589	775	622	406	53	78	7059	21	1 82	12	42 67	9	O. L. Woodfield.....	1300
Onawa.....	1986	908	525	393	43	75	6386	09	1 80	13	48 00	9	E. T. Sheppard.....	1100
Osage.....	2784	775	698	498	68	76	8046	99	1 91	18	46 98	9	George H. Sawyer.....	1200
Oswego.....	2505	808	671	522	65	78	7511	00	1 54	16	44 37	9	A. M. M. Dornon.....	1150
Pella.....	2923	987	674	476	48	73	5950	00	1 89	14	59 99	9	W. C. Farmer.....	1000
Rock Rapids.....	1768	589	576	456	73	76	7680	00	1 86	14	50 84	9	W. S. Wilson.....	1440
Sac City.....	2079	708	662	519	74	82	6187	50	1 82	12	42 07	9	C. F. Garrett.....	1150
Seymour.....	1708	682	486	425	51	87	3637	50	96	8	34 69	9	A. P. Speers.....	810
Sheldahl.....	2282	855	738	625	73	79	10009	25	1 78	20	47 35	9	O. M. Elliott.....	1350
Shigourney.....	1982	644	554	438	67	73	6944	12	1 79	15	40 77	9	W. O. Mullin.....	1000
Storm Lake.....	2169	736	656	521	71	80	7804	87	1 67	15	50 90	9	J. H. O'Donoghue.....	1375
Stuart.....	2079	619	508	474	77	98	8275	00	1 81	16	51 23	9	Clarence McCracken.....	1200
Tama.....	2649	708	542	432	61	80	6981	72	1 67	13	49 50	9	O. E. Fleming.....	1300
Tipton.....	2518	692	588	490	62	81	7851	25	2 08	15	51 00	9	C. R. A. rner.....	1200
Toledo.....	1941	583	490	344	65	80	7484	96	2 41	14	49 52	9	J. B. Young.....	1300
Valley Junction.....	1700	736	568	521	71	98	8610	47	1 75	19	49 08	9	C. W. Lyon.....	1200
Villisca.....	2221	675	609	521	77	78	7685	48	1 60	15	48 00	9	E. B. Wickerham.....	1300
Waukon.....	2158	674	481	360	58	88	6187	50	1 73	12	48 35	9.5	H. A. Dwellie.....	1200
West Liberty.....	1690	514	497	375	73	80	6816	00	1 98	12	49 00	9	E. F. Schall.....	1400
West Union.....	1985	582	506	406	70	80	8496	28	1 50	15	50 12	9	L. J. Ayer.....	1200
Whit Cheer.....	2746	584	490	410	88	98	5947	75	1 25	15	40 98	9	J. E. Witmer.....	1000

## GRADED SCHOOLS.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enumeration between 5 and 21 years in 1904	Enrolled in school, 1903-1904.	Average attendance, 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Abington .....	310	8	102	87	67	\$ 1 34	R. M. Caviness.....	\$ 382	1	\$35 00
Ackley .....	1445	9	440	390	302	1 57	W. H. Lancelot.....	1000	9	50 52
Adair .....	879	9	216	230	202	8 30	John E. Foster.....	1000	6	38 00
Adel .....	1218	9	414	364	279	2 06	J. W. Graham.....	1000	12	45 35
Afton .....	1178	9	331	306	230	1 80	J. R. McComb.....	900	9	40 00
Agency .....	408	8.5	214	204	190	1 65	C. F. Goltry.....	700	5	45 00
Ainsworth .....	404	8.5	179	161	139	1 19	T. H. Barnes.....	680	3	47 78
Akron .....	1029	9	421	402	283	1 59	O. J. Smith.....	810	7	50 00
Albert City .....	150	9	66	52	32	2 64	Emma Hawk.....	383	1	42 50
Albion .....	440	9	239	254	191	1 32	J. H. Dutton.....	60	5	45 00
Alden .....	700	9	354	229	198	1 64	Louise Taylor.....	675	6	41 66
Alexander .....	300	.....	.....	.....	.....	.....	G. A. Shaver.....	282	1	34 00
Allerton .....	950	8	304	36	305	1 17	J. F. Holiday.....	* 600	5	35 00
Allison .....	465	9	173	161	116	1 70	E. E. Waters.....	630	5	40 00
Alta .....	961	9	310	270	211	1 59	A. J. Bell.....	675	6	43 42
Alta Vista .....	179	9	77	64	44	1 81	Milly Scheutz.....	390	1	40 00
Alton .....	1000	9	474	178	134	1 34	F. E. Fuller.....	720	6	45 16
Altoona .....	324	9	115	114	80	2 00	W. H. Reed.....	540	3	53 33
Alvord .....	249	9	121	97	70	1 57	Lily I. Laughlin.....	570	1	45 00
Andrew .....	273	9	113	108	83	1 39	Charles Paul.....	450	2	32 50
Angus .....	333	9	.....	.....	.....	.....	C. S. Dalby.....	540	1	40 00
Anita .....	968	9	408	343	266	1 60	Will J. Cattill.....	1000	8	47 14
Ankeny .....	161	9	106	102	58	1 32	C. K. Thornburg.....	450	3	45 00
Anthon .....	473	9	201	186	133	1 70	Paul J. Scarbro.....	720	4	52 19
Aplington .....	427	9	153	130	100	2 23	A. C. Voelker.....	675	3	43 33
Arcadia .....	405	9	228	95	57	2 89	C. M. Williams.....	675	2	45 00
Arlington .....	833	9	282	241	183	1 65	G. L. Rawson.....	765	7	40 00
Armstrong .....	907	9	420	386	260	2 23	A. P. Hargrave.....	810	6	43 00
Arnold's Park .....	251	8	68	58	40	2 50	.....	.....	.....	.....
Arthur .....	162	9	9	83	83	1 80	Ella Hargrove.....	540	2	45 00
Ashton .....	513	9	225	117	71	2 88	William McKinley .....	630	3	45 00
Aspinwall .....	151	9	67	44	32	2 34	F. M. Essex.....	390	1	35 00
Atalissa .....	300	9	121	128	93	2 42	G. R. Buckles.....	630	3	38 33
Athelstan .....	251	8	.....	.....	.....	.....	H. Barnes.....	320	2	37 50
Auburn .....	293	9	142	136	115	1 48	Kittie M. Howard.....	495	2	37 50
Aurelia .....	621	9	220	178	144	1 97	Charles D. Curtis.....	720	5	41 00
Aurora .....	361	9	112	101	63	1 98	Lucie B. Francis.....	450	2	37 50
Avery .....	425	8	173	151	102	84	H. A. Reed.....	400	1	40 00
Ayrshire .....	329	9	167	115	75	1 75	Charles Cookingham.....	450	2	40 00
Bagley .....	355	9	129	137	103	1 74	E. E. Franklin.....	540	4	45 00
Baldwin .....	254	9	125	109	71	3 05	D. S. Welch.....	720	3	35 00
Bancroft .....	839	9	379	160	136	2 32	S. Backus.....	900	5	45 20
Barnes City .....	274	9	141	141	94	1 08	J. H. Atkinson.....	630	4	44 37
Barnum .....	184	10	47	41	25	2 00	.....	.....	.....	.....
Bassett .....	149	9	94	75	55	1 57	Cora Dickson.....	360	1	35 00
Batavia .....	533	8	178	174	132	1 28	E. F. Snow.....	480	3	35 00
Battle Creek .....	542	9	212	172	131	2 47	W. B. Munson.....	675	5	45 00
Baxter .....	421	9	176	169	116	1 42	W. E. Rorabaugh.....	630	3	38 75
Bayard .....	494	9	152	187	144	1 53	F. J. Mantz.....	720	5	48 00
Beacon .....	953	9	329	270	178	1 36	F. P. McMurray.....	630	5	42 00
Beaconsfield .....	177	2	71	58	35	2 00	F. L. Willey.....	360	1	30 00
Beaman .....	260	9	77	62	46	2 82	G. A. Simms.....	450	2	40 00
Belknap .....	110	8	90	77	51	1 23	C. D. Evans.....	270	2	36 37
Belmond .....	1234	9	411	340	295	1 89	Frank Popham.....	1100	11	50 20
Bennett .....	238	9	94	60	40	2 43	George H. Kellogg.....	525	1	45 00

\* Plus one-half tuition.

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population census of 1900.	Number months school.	Enumeration between 5 and 21 years in 1904.	Enrolled in school, 1903-1904.	Average attendance since 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Bentonport.....	251	7	64	51	20	\$ 3 93	J. K. McCullough.....	\$ 490	1	\$40 00
Bevington.....	167	8	52	37	21	1 41				
Birmingham.....	622	9	180	180	148	1 59	J. W. Fish.....	590	5	53 00
Blairsburg.....	236	9	77	82	59	2 00	D. H. Rummel.....	675	2	45 00
Blairstown.....	592	9	214	196	150	1 77	J. W. Martin.....	810	4	45 00
Blakesburg.....	350	8	114	108	64	1 40	A. E. Judd.....	400	1	40 00
Blencoe.....	279	9	143	101	82	1 70	F. J. Atkinson.....	540	2	40 00
Blockton.....	704	9	239	237	210	1 23	Stilas John-on.....	720	6	44 58
Blanchard.....	704	9	126	187	161	1 53	J. E. McLean.....	675	4	48 20
Bode.....	409	8	164	127	86	1 63	A. C. Anderson.....	480	2	40 00
Bonaparte.....	898	8	278	186	162	1 84	J. H. Voss.....	720	5	42 00
Bondurant.....	297	9	110	110	76	1 74	Mrs. Mabel Huffman.....	473	2	42 50
Boyden.....	536	9	132	105	80	2 10	C. G. Ames.....	450	9	40 00
Bradyville.....	236	9	124	125	77	1 85	B. F. Wescoat.....	540	2	42 50
Brandon.....	400	8.5	88	81	59	1 24	Mary LeMaster.....	405	1	40 00
Brazil.....	645	9	288	118	90	1 06	Rella Ritchell.....	270	1	30 00
Breda.....	395	9	168	30	29	3 45				
Bridgewater.....	375	9	141	119	85	1 41	C. E. Geesaman.....	450	2	85 00
Brighton.....	807	9	286	251	188	1 46	Walter Holcomb.....	675	5	40 00
Bristow.....	317	9	120	134	92	2 48	J. A. Woodruff.....	600	4	32 55
Brooklyn.....	1188	9	447	341	279	2 01	Eugene Henely.....	1200	9	50 00
Brooks.....	215	8	72				H. G. Gibson.....	300	2	30 00
Buchanan.....	61	9	117	81	62	1 29	L. Blanche Chaney.....	320	2	40 00
Buckeye.....	50	9	50	50	85	2 57	Luke P. Manning.....	450	1	40 00
Buffalo.....	372	9	177	185	105	1 26	A. K. Claypool.....	540	8	37 23
Buffalo Center.....	872	9	414	335	241	1 65	F. O. Smith.....	720	8	
Burr Oak.....	300	8.5	90	75	47	1 86	A. B. Street.....	400	1	40 00
Burt.....	504	9	138	165	127	1 67	A. S. Murray.....	675	4	45 84
Buway.....	550	9	249	256	176	1 81	Anna Harding.....	450	3	40 00
Cafo.....	75	8	70	49	38	1 71	H. H. Winder.....	360	1	33 00
Calamus.....	287	9	125	162	75	1 70	I. B. Roscoe.....	670	2	37 50
Callendar.....	399	8	137	128	81	1 56	W. L. Hamilton.....	400	2	38 75
Calmar.....	1003	9.5	392	197	141	1 91	F. C. Clark.....	1000	4	41 25
Camanche.....	718	9	195	136	113	1 36	Wm. Stone.....	517	3	35 00
Cambridge.....	667	9	176	230	158	1 29	E. S. Smith.....	720	3	40 00
Centril.....	356	8	86	84	64	1 88	George P. Chapman.....	480	2	30 00
Carbon.....	350	9					T. B. Homan.....	280	2	35 00
Carlisle.....	558	9	245	243	158	1 29	M. D. Sutton.....	540	4	35 00
Carson.....	632	9	336	237	155	2 00	W. J. Flint.....	810	5	44 00
Cascade.....	1286	8	240	139	90	2 72	Rose Brownson.....	450		
Casey.....	568	9	230	222	168	1 74	J. O. Huntley.....	720		47 50
Castalia.....	200	9	87	65	29	3 18	A. A. Nelson.....	320	1	30 00
Castana.....	558	9	161	124	91	2 09	W. E. Atkinson.....	1000	3	50 00
Center Grove.....	10		161	55	37	1 60	Mamie Luke.....	350		
Center Junction.....	255	9	100	40	20	2 22	W. W. Crawford.....	585	2	37 50
Center Point.....	674	9	234	218	167	1 19	L. D. Curtis.....	630	4	32 80
Central City.....	623	9	224	240	187	1 42	W. S. Still.....	690	6	35 00
Chapin.....	200	9	92	95	53	1 74	Clarence Baker.....	468	1	40 00
Charleston.....	128	8	121	60	49	1 09	C. L. Stephenson.....	320	2	30 00
Charlotte.....	230	10	131	108	72	1 66	S. M. Ballard.....	550	2	30 00
Charter Oak.....	772	9.5	302	234	217	1 22	W. S. Mitchell.....	950	6	45 50
Chelsea.....	419	9	107	115	92	1 85	H. M. Tiffany.....	540	3	56 66
Chester.....	400	9	112	98	63	1 59	John Hazelton.....	540	1	40 00
Chilli-otho.....	216	8	67	62	20	4 46				
Churdan.....	626	9	200	191	139	1 50	Tilman Smith.....	675	4	41 25
Cincinnati.....	1212	8	412	382	271	1 09	P. B. Woods.....	720	6	36 00
Clarence.....	675	9	176	176	135	2 08	James H. Morgan.....	1000	4	42 50
Clarion.....	1475	9	518	463	394	1 60	Ernest W. Fellows.....	1000	11	61 46
Clarksville.....	849	9	205	204	138	2 06	J. O. Briggs.....	720	5	40 80
Clayton.....	398	9	43	43	34	2 20	C. D. McGoan.....	405	1	30 00
Clearfield.....	698	9	250	274	211	1 69	J. D. Cherryholmes.....	720	7	51 60
Cleghorn.....	298	9	89	96	59	1 95	Johns Hayes.....	585	1	50 00
Clermont.....	513	9	274	195	135	1 28	Richard Andrews.....	675	4	47 17
Cleveland.....	202	9					Anna Criswell.....	960	3	89 00
Coal Creek.....	65	7.5	64	50	28	1 39	A. E. Murley.....	300	1	35 00

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enumeration between 3 and 21 years in 1904.	Enrolled in school, 1903-1904.	Average attendance, 1903-1904.	Average tuition per scholar for each month in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
*Capital Park....	0		940	765	584	2 04	W. A. Brandenburg ..	\$1200	26	\$45 74
Coggon.....	498	9	177	162	131	1 25	W. L. Gates.....	540	3	35 00
Coin.....	574	+								
Colesburg.....	274	9	90	56	43	1 98	Gus Delaney.....	450	1	35 00
Collins.....	540	9	173	161	120	1 50	C. Baker.....	540	2	40 00
College Springs.....	693	9	205	146	120	1 54	Servia Babcock.....	495	3	43 33
Colo.....	391	9	172	148	114	1 58	M. C. Morrison.....	540	3	40 00
Columbus City.....	388	8	167	115	88	2 02	R. R. Hunt.....	550	3	37 50
Columbus Jet.....	1009	9	379	320	259	1 85	M. C. Couch.....	900	9	44 55
Conrad.....	483	9	180	181	140	1 64	D. R. Marling.....	675	4	42 50
Conway.....	348	8.5	140	138	120	2 22	Will R. Woodruff.....	425	4	39 78
Ocon Rapids.....	1017	9	458	392	286	1 41	C. F. Schell.....	900	7	42 00
Correctionville.....	935	9	540	374	320	1 02	T. B. Morris.....	1150	9	44 00
Corwith.....	651	9	190	190	119	2 70	J. R. Bagge.....	900	5	44 33
Corydon.....	1477	9	480	500	357	1 49	W. L. Pugh.....	1000	9	39 44
Crawfordsville.....	268	9	132	150	105	1 90	A. W. Graham.....	630	3	43 33
Cromwell.....	208	9	89	90	73	1 34	Alfred Peterson.....	510	1	40 00
Crystal Lake.....	246	9	65	64	41	1 80	Minnie Cramer.....	360	1	34 00
Cumberland.....	591	9	261	221	163	1 35	Frank Lindeman.....	810	3	55 00
Curlow.....	170	9	78	62	34	2 80	P. A. Long.....	540	1	35 00
Cushing.....	237	9	103	99	76	2 01	H. P. Nelson.....	560	3	51 20
Dahlonega.....	125	8	62	44	31	2 07	C. D. Giltner.....	280	1	30 00
Dakota City.....	362	9	136	125	90	1 52	E. B. Bravender.....	559	2	37 22
Dallas.....	187	8.5	103	89	61	1 30				
Dallas Center.....	625	9	233	276	215	1 9	W. H. Gemmill.....	945	8	52 50
Davis City.....	617	8	225	225	177	1 16	J. M. Howell.....	580	4	37 50
Danbury.....	480	9	480	289	372	1 89	H. S. Stein.....	810	9	47 33
Danville.....	238	9	47	60	48	1 90	W. L. Packer.....	500	1	35 00
Dawson.....	290	8	130	89	73	1 08	Grace M. Bice.....	320	1	39 09
Dayton.....	753	9	239	229	176	1 55	Anna B. Black.....	585	5	43 00
Decatur.....	307	9	156	151	83	1 56	S. A. Krell.....	400	2	35 00
Deedah.....	374	9	147	138	95	1 71	H. W. Dana.....	600	3	40 00
Deep River.....	403	9	215	200	181	1 27	M. F. Morgan.....	810	3	35 00
Defiance.....	387	9	135	155	99	1 83	B. M. Taylor.....	540	4	45 00
Delaware.....	815	9	111	90	66	2 04	Anna O'Connor.....	450	2	35 00
Delhi.....	333	9	180	120	88	1 41	T. V. Hunt.....	495	2	36 50
Delmar.....	592	9	223	151	120	1 40	Joseph M. Fouts.....	54	3	36 66
Delta.....	691	9	257	254	168	1 73	C. E. Humphreys.....	520	6	38 33
Derby.....	197	9	91	84	52	1 29	Elida Johnston.....	390	1	35 00
Denver.....	102	9	111	83	34	1 08	Wynona L. Knight.....	390	1	35 00
De Soto.....	845	9	149	144	102	1 75	J. R. Cash.....	675	4	51 25
Dewey.....	15	8	54	54	33	2 40	C. A. Nystrom.....	480	1	40 00
Dexter.....	795	9.5	243	224	144	2 67	D. P. Repass.....	540	3	38 33
Diagonal.....	383	9	175	128	119	1 54	L. M. Burgess.....	450	2	40 00
Dickens.....	241	9	103	108	66	1 95	John Larson.....	405	1	40 00
Dike.....	200	9	95	67	21	2 02	M. G. Ganskin.....	480	1	42 50
Dixon.....	810	9	104	85	60	1 61	Wm. W. Graham.....	630	1	40 00
Dolliver.....	250	9					Blanch Miles.....	460	2	40 00
Donnellson.....	270	8	85	50		1 85	Sadie M. Briton.....	765	4	47 60
Doon.....	545	9	184	192	140	1 96	B. T. Youel.....	810	5	52 00
Dow City.....	462	9	228	210	163	2 00	H. D. Kies.....	405	1	40 00
Downey.....	110	9	61	51	22	1 53	Mary Secrest.....	900	8	49 99
Dows.....	818	9	231	288	202	1 98	W. H. Blakely.....	240	2	42 50
Drakeville.....	238	8	90	77	51	1 23	M. C. Galpen.....	585	3	40 84
Dumont.....	433	9	205	176	124	1 45	M. M. McFee.....	495	2	38 75
Duncombe.....	350	9	138	128	90	1 47	L. C. Lovejoy.....	910	7	45 00
De Witt.....	1323	9	423	273	201	1 93	Margaret Buchanan.....	1000	11	46 25
Dunlap.....	1353	9	606	475	393	1 57	E. O. Bronson.....	630	2	46 25
Durant.....	560	9	201	147	100	1 04	T. C. Wickes.....	700	1	48 00
Dyersville.....	1823	10	680	76	60	2 55	W. E. Evans.....	810	6	48 00
Dysart.....	492	9	298	242	207	1 64	W. G. Martin.....	1100	5	52 00
Earlham.....	630	9	276	340	238	1 48	W. H. Monroe.....			
Earling.....	340	9	155	53	31	2 51				

\* P. O. Des Moines.  
 † See Snow Hill.  
 ‡ \$913.00.

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enumeration between 5 and 21 years in 1904.	Enrolled in school, 1903-1904.	Average attendance, 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Barly .....	579	9	216	190	151	1.92	B. J. Still .....	\$ 675	5	\$48 00
Barville .....	618	9	183	194	181	1.21	W. H. Hazard .....	680	5	48 00
*Easton Place .....	9	9	263	196	198	1.69	Elizabeth Pittgers .....	540	6	41 86
East Peru .....	252	9	96	80	50	1.00	W. O. Patterson .....	380	2	37 50
Edgewood .....	509	9	87	132	132	1.82	S. M. Wallace .....	680	5	48 00
Elberon .....	844	9	112	92	64	1.87	J. H. Rohde .....	675	4	35 00
Elgin .....	685	9	210	169	137	1.54	J. H. Williams .....	675	4	47 63
Elk Horn .....	150	8	120	90	22	2.35	M. C. Peterson .....	450	2	45 00
Elkport .....	823	9	199	116	54	1.53	Peter White .....	450	2	36 00
Elliot .....	516	9	166	104	155	1.85	W. B. Gregg .....	720	5	40 00
Ellison .....	242	9	108	110	82	2.14	J. W. Long .....	540	8	35 00
Ellsworth .....	819	9	160	147	105	1.35	O. S. Von Krog .....	720	2	40 00
Elma .....	976	9	838	302	222	1.48	A. R. McCook .....	675	6	40 83
Elwood .....	107	9	68	58	48	1.88	Amos Hill .....	495	1	35 00
Ely .....	215	9	74	86	40	2.00	Leslie O. Worley .....	405	1	35 00
Emerson .....	502	9	217	196	155	1.94	J. D. Reed .....	720	5	44 00
Elkader .....	1821	9	591	258	172	2.39	J. C. Blyman .....	1000	6	48 33
Epworth .....	579	9	175	128	97	1.45	Annie J. O'Connor .....	480	5	44 00
Essex .....	710	9	242	220	163	1.78	M. H. White .....	680	3	40 00
Everly .....	500	9	184	120	89	2.18	F. B. Steeco .....	680	3	40 00
Evans .....	609	9	287	248	150	9	Estella Sullivan .....	408	3	36 50
Eddyville .....	1230	9	340	292	243	1.44	L. P. Breeden .....	810	2	43 38
Exira .....	851	9	819	256	191	1.78	F. A. Nims .....	810	6	41 67
Exline .....	101	8	100	90	53	1.24	C. E. Evans .....	820	5	41 67
Fairbank .....	644	9	213	141	104	1.77	C. W. Miller .....	540	2	34 10
Fairfax .....	271	9	807	292	177	3.25	W. S. Mason .....	585	2	34 10
Farley .....	518	9	289	164	127	1.30	Mary Rourke .....	580	1	35 00
Farmersburg .....	140	8.5	106	85	66	1.51	A. F. Rogers .....	450	1	38 57
Farmington .....	1832	8	869	396	275	1.34	A. F. S. Owen .....	800	7	37 50
Farmhamville .....	848	9	126	114	83	2.07	O. E. Hibbs .....	540	3	37 50
Farragut .....	514	9	191	166	140	2.19	C. P. Beal .....	900	4	41 50
Fayette .....	1815	9	846	257	182	1.93	J. E. Moore .....	1000	9	52 35
Fenton .....	175	9	73	61	38	2.63	C. A. McChesney .....	450	1	45 00
Fertile .....	180	8	88	80	65	1.54	C. E. Elkinbary .....	400	1	50 00
Florida .....	213	8	111	111	60	1.33	L. J. Anderson .....	880	2	40 00
Floyd .....	353	9	109	103	80	2.36	E. A. Sheldon .....	675	3	48 33
Fonda .....	1180	9	342	371	250	1.65	C. J. Boyington .....	832	7	46 28
Fontanelle .....	858	9	269	201	156	2.31	P. P. Sullivan .....	1000	6	43 33
Ft. Atkinson .....	264	9	177	6	28	3.18	W. A. Daskman .....	450	1	30 00
Foster .....	205	9	123	128	84	1.13	N. J. Hibbs .....	495	1	40 00
Franklin .....	210	9	115	54	35	2.40	Jessie Dunagan .....	175	2	29 50
Frankville .....	171	8	61	51	33	1.92	Anna C. Duggan .....	320	1	38 57
Fraser .....	1000	9	355	231	148	94	J. E. Stuckley .....	540	3	31 66
Fredricksburg .....	565	9	305	130	112	1.47	Ray Golly .....	540	8	35 00
Freeport .....	180	8	65	57	20	1.54	Clara Stinson .....	280	1	30 00
Fremont .....	542	8	163	177	120	1.83	Charles E. Young .....	560	5	44 00
Frederika .....	170	8	69	47	18	1.81	Bertha L. Johnston .....	270	1	30 00
Galt .....	200	9	76	75	55	1.69	H. W. Sutter .....	500	2	45 77
Galva .....	456	9	196	200	150	4.06	F. L. Renshaw .....	675	5	47 00
Garden Grove .....	651	9	228	228	172	1.68	A. L. Lyon .....	810	5	44 00
Garnaville .....	340	9	132	89	55	2.36	W. E. Lockridge .....	585	2	35 00
Garner .....	1288	9	422	357	280	1.85	W. J. Jerome .....	950	11	41 07
Garrison .....	482	9	182	151	115	1.87	L. J. McGinnity .....	765	8	48 33
Geneva .....	300	8.5	69	71	51	2.49	E. S. Smith .....	495	1	40 00
George .....	894	9	126	120	88	2.53	E. T. Gilman .....	630	3	50 00
Germania .....	834	9	119	111	88	1.69	A. E. Jewett .....	540	2	41 50
Gifford .....	99	8	89	69	43	1.67	B. L. Dorman .....	835	1	40 00
Gilbert Station .....	158	9	123	109	75	1.95	Harry Kies .....	500	1	40 00
Gilman .....	465	9	218	181	136	2.72	D. A. Tisdale .....	630	4	47 75
Gilmore City .....	687	9	143	243	172	1.38	L. A. Wilson .....	675	4	40 63
Gorwin .....	470	9	135	130	100	1.90	Will A. Pye .....	680	3	40 00
Gladbrook .....	842	9	326	272	213	1.50	H. B. Shoemaker .....	810	5	45 30
Glidden .....	783	9	275	247	241	1.80	E. D. Gepson .....	900	6	52 00
Goldfield .....	628	9	258	257	173	3.28	O. H. Benson .....	765	8	49 42
Goodell .....	254	9	104	104	74	1.83	J. D. G. Houghton .....	496	2	40 00

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enrollment between 9 and 21 years in 1904.	Enrolled in school 1903-1904.	Average attendance, 1903-1904.	Average tuition per scholar for average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Gowrie.....	681	9	232	197	177	1 27	W. H. Ray.....	\$ 720	4	\$35 75
Graettinger.....	888	9	206	190	118	1 48	F. H. Dawson.....	498	3	40 00
Grafton.....	156	9	95	55	44	1 90	Mary Curry.....	387	1	40 00
Grundy Center.....	1322	9	437	387	292	2 09	C. L. Love.....	1000	12	42 50
Grand Mound.....	355	9	136	113	87	1 53	A. Deiderich.....	650	2	37 50
Grand Junction.....	1113	9	377	310	207	1 82	T. R. Amle.....	900	6	48 75
Grant Park.....	0	9	525	405	287	1 43	E. O. Heaton.....	540	14	40 50
Grand River.....	826	8	127	133	90	1 77	H. L. Cooner.....	480	3	33 33
Grant City.....	249	9	90	66	39	1 85	A. E. Brown.....	315	1	35 00
Granville.....	351	10	189	62	39	2 60	R. M. Lampman.....	600	1	40 00
Gravity.....	549	9	186	170	129	1 41	W. H. Cash.....	505	4	44 37
Gray.....	180	9	68	49	67	1 96	K. G. Lancelot.....	540	2	36 00
Greeley.....	488	9	130	126	78	2 37	Thos. Farrell.....	585	8	40 00
Greene.....	1192	9	388	305	260	1 84	W. W. Overmeyer.....	1000	8	45 38
Greenfield.....	1300	9	470	368	340	1 63	W. R. Andrews.....	1100	10	43 25
Grimes.....	186	8	188	177	110	1 22	P. L. Sager.....	520	4	40 00
Griswold.....	909	9	233	244	201	1 81	D. C. Neifert.....	1000	6	45 42
Guthrie Center.....	1193	9	476	398	305	1 49	C. V. Williams.....	900	10	49 48
Guernsey.....	124	8	70	57	80	1 34	W. A. Service.....	400	1	40 00
Hartwick.....	120	8	64	64	86	57	L. J. White.....	810	1	35 00
Horton.....	100	9	64	58	25	1 50	Maud Meeker.....	360	1	35 00
Hamilton.....	588	8	225	179	120	1 48	Mrs. Edna Whitlatch.....	495	8	40 00
Hancock.....	267	9	100	91	70	2 15	N. S. Lyman.....	630	2	40 00
Harcourt.....	192	8	76	58	35	1 85	Mabel Langdon.....	360	1	35 00
Hardy.....	174	9	116	86	55	2 37	Elsie T. Attosen.....	450	1	35 00
Harper's Ferry.....	259	9	116	91	66	1 28	M. D. Kelly.....	450	1	35 00
Harris.....	317	9	82	88	50	1 31	E. E. McFarland.....	540	1	40 00
Hartford.....	190	8	82	88	50	1 31	R. A. Sell.....	320	1	27 00
Hartley.....	1006	9	311	369	298	1 75	D. M. Odle.....	1000	9	45 83
Hastings.....	404	9	146	125	98	1 56	U. S. Webber.....	540	3	45 00
Havelock.....	397	9	121	120	92	2 34	Bion H. Culver.....	675	3	46 33
Hawkeye.....	518	9-5	112	168	128	1 34	E. C. Preston.....	605	4	44 00
Hayfield.....	104	7-5	73	61	45	1 65	Mabel Walker.....	298	1	34 00
Hazelton.....	500	9	227	247	105	1 78	Harriet H. Wroten.....	405	3	38 33
Hedrick.....	1035	8	353	336	291	1 25	Mary Bryant.....	600	6	38 33
Henderson.....	244	9	100	109	71	2 53	J. B. Van Pelt.....	630	3	36 50
Hesper.....	229	9	95	99	55	1 89	J. P. Street.....	540	1	50 00
Hittman.....	1000	9	654	423	351	95	L. W. Fike.....	765	6	37 50
Hillsboro.....	225	8	90	80	65	1 77	O. A. Collins.....	490	1	35 50
Hillsdale.....	244	9	113	114	73	1 77	Ernestine Houston.....	450	2	40 00
Hocking.....	400	9	428	239	155	1 03	John Hickman.....	450	3	36 25
Holland.....	175	9	68	54	44	1 57	W. G. Strack.....	315	1	32 00
Holstein.....	870	9	383	275	222	2 10	R. A. Griffin.....	810	6	50 00
Hoperville.....	145	7-5	91	72	58	1 21	L. C. Smith.....	5	1	32 50
Hopkinton.....	767	9	237	204	157	1 82	John G. Saam.....	652	4	41 85
Hornick.....	284	9	107	113	73	3 28	T. V. Bird.....	540	5	44 00
Hosper.....	415	10	200	132	82	1 81	J. Guy Honnold.....	600	2	44 25
Hubbard.....	676	9	206	160	109	2 87	W. O. Reed.....	774	6	45 39
Hull.....	629	9	321	242	200	2 13	S. T. Neveln.....	810	7	47 70
Humboldt.....	1474	9	423	464	354	1 67	C. S. Cory.....	1050	10	46 50
Humeston.....	945	9	330	295	224	1 58	Inez F. Kelso.....	900	6	38 71
Imogene.....	206	9	9	91	50	1 79	C. B. Woodrum.....	450	1	38 50
Incline.....	750	9	53	41	24	2 46	.....	400	2	42 50
Indianapolis.....	142	8	66	50	20	2 30	Frank Haile.....	675	4	46 25
Inwood.....	477	9	212	192	149	1 80	B. L. Bankert.....	540	3	40 00
Ionia.....	306	9	145	122	98	1 75	O. N. Olsson.....	360	5	40 00
Iowa Center.....	800	8	69	56	34	2 05	Nellie White.....	675	4	50 00
Ireton.....	545	9	227	184	138	2 00	J. E. Johnson.....	540	3	45 00
Irwin.....	205	9	122	130	88	2 04	James Seymour.....	630	3	45 00
Jamaica.....	428	9	161	128	108	1 22	E. C. Kinney.....	540	3	50 00
Janesville.....	311	9	94	8	64	1 57	R. A. Fenney.....	540	1	40 00
Jerome.....	300	8	41	109	86	1 23	G. W. Horn.....	320	1	38 75
Jesup.....	690	9	162	163	119	1 98	T. A. Walters.....	675	4	40 00
Jewell.....	947	9	263	215	161	1 55	A. R. Gardiner.....	765	4	40 00
Jolley.....	266	9	109	97	59	2 94	H. A. Crawford.....	540	2	40 00

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enumeration between 5 and 21 years in 1904.	Enrolled in school 1903-1904.	Average attendance, 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Kalona .....	530	9	256	148	110	\$ 1 77	W. S. Mitchell .....	\$ 675	3	\$40 00
Kamar .....	223	9	150	112	89	1 05				
Kanawha .....	375	9	118	118	78	2 15	C. A. Pillsbury .....	675	2	40 00
Kellerton .....	458	8 5	197	185	150	1 67	H. H. Linton .....	552	4	40 50
Kellogg .....	653	9	173	167	118	1 81	F. M. Phillips .....	760	4	36 95
Kent .....	225	9	73	73	45	2 43	James S. Francis .....	540	1	50 00
Kensett .....	459	8 5	156	128	98	1 02	Amos Huffman .....	*	2	30 00
Kenwood Park .....	283	9	238	174	126	1 66	W. T. Wolfe .....	585	4	33 00
Keota .....	996	9	273	256	203	1 60	Charles Yeager .....	720	5	33 00
Keswick .....	350	8	150	152	131	2 10	Frank Shultis .....	620	2	35 00
Keystone .....	405	9	123	95	83	1 90	J. H. Rozema .....	650	2	45 00
Kierim .....	277	9	101	81	47	2 08	Charles West .....	540	2	37 20
Kingsley .....	720	9	302	328	248	1 21	W. A. Burton .....	810	7	43 57
Kinross .....	132	9	77	88	59	1 61	H. P. Trumbo .....	440	1	40 00
Kirkman .....	203	9	74	74	46	1 77	W. J. Luxford .....	540	2	45 00
Kirkville .....	402	8	159	141	105	1 52	C. H. Thomas .....	440	3	35 00
Klemme .....	262	9	127	107	67	1 83	G. G. Washburn .....	389	2	41 00
Knowlton .....	267	8	116	113	72	1 32	B. H. Callison .....	360	2	32 50
Kossuth .....	248	8	67	51	32	2 50	Ella M. Parker .....	400	1	30 00
Kossauqua .....	1117	8	358	390	281	1 40	David Williams .....	1000	8	41 25
Lacona .....	496	9	211	196	144	1 19	George Eaton .....	585	3	36 67
Ladora .....	289	9	125	106	86	2 30	T. E. McDonald .....	630	3	44 00
Lake Mills .....	129	9	514	440	329	1 68	W. H. Whitford .....	765	11	
Lake Park .....	540	9					Maurice Hassel .....	765	5	41 00
Lake View .....	591	9	180	172	129	1 75	John R. Slacke .....	630	4	39 00
Lamont .....	636	9	214	230	179	1 42	C. G. Sutton .....	675	5	36 00
LaMotte .....	272	8	148	125	86	1 22	Emma C. Ahlers .....	405	2	30 00
Lancaster .....	100	9	59	54	32	2 58	S. E. DuVilliss .....	320	1	27 73
Lansing .....	1438	9	514	298	273	1 85	W. H. Ray .....	1200	7	40 00
LaPorte City .....	1419	9	456	391	275	1 35	L. R. Minkel .....	1000	8	44 38
Larchwood .....	450	9	151	151	108	1 97	C. B. Mericle .....	675	3	35 67
Larrabee .....	125	9	68	78	48	2 19	J. L. Hearer .....	540	1	45 00
Latimer .....	310	9	139	128	76	1 52	M. H. Madsen .....	378	2	37 00
Laurens .....	853	9	310	309	250	1 65	W. H. Reeve .....	800	7	46 23
Lawler .....	646	9 5	250	101	69	1 53	A. F. Rholinger .....	570	3	35 33
LeClair .....	997	9	166	142	104	2 40	E. W. B. Mark .....	720	4	42 50
Ledyard .....	257	9	90	77	53	2 24	A. E. Marble .....	450	2	40 00
LeGrand .....	408	9	123	89	61	2 28	G. M. Dimmitt .....	495	2	40 00
Lehigh .....	806	9	459	296	290	1 15	E. E. Cavanaugh .....	576	5	38 00
Leland .....	215	7 6	132	70	46	2 30	Joseph Bowman .....	320	2	32 00
Leighton .....	204	8	80	67	45	1 90	H. C. Poelofaz .....	400	2	42 50
Lenox .....	914	9	394	273	243	1 89	E. E. Kuhn .....	1000	9	51 24
Lester .....	225	9	98	82	64	2 34	R. E. Scott .....	540	2	45 00
Letts .....	387	9					L. P. Bredeen .....	630	3	40 00
Lettsville .....		9	138	115	90	2 11	C. E. Moffitt .....	585	3	40 00
Lewis .....	613	9	253	258	203	1 39	A. D. King .....	720	5	42 50
Liberty Center .....	82	8	39	52	35	2 00	C. C. Taylor .....	320	1	30 00
Libertyville .....	350	8	96	75	63	1 28	Harley Young .....	400	1	35 00
Lime City .....	150	8	81	27	20	2 50	L. J. Cuniff .....	400		
Lime Springs .....	905	9	224	181	139	1 97	F. A. Welch .....	675	5	40 00
Linden .....	314	9	137	142	133	1 63	C. F. Barrows .....	585	4	46 25
Lineville .....	690	9	262	215	162	1 65	O. H. Hollen .....	675	4	41 25
Linn Grove .....	275	9	174	149	114	1 62	C. F. Eakin .....	600	3	38 00
Lisbon .....	953	9	281	207	168	1 32	P. W. Peterson .....	1000	5	44 20
Liscomb .....	338	8 5	146	118	96	2 08	C. W. Lyons .....	675	3	42 00
Little Rock .....	399	9	110	95	77	2 67	J. E. Troth .....	630	3	45 00
Little Sioux .....	427	9	158	152	121	1 45	J. M. Ireland .....	630	3	35 00
Livermore .....	618	9	205	190	134	2 24	Henry W. Chebeck .....	675	5	45 00
Lloyd T. p. Terrill .....	217	8	179	191	120	1 67	T. Tompkins .....	600	3	40 00
Logan .....	1377	9	487	453	360	1 67	C. E. Blodgett .....	1125	10	48 00
Lonsville .....	597	9	192	181	148	1 85	W. W. Bell .....	765	5	46 00
Lone Tree .....	600	9	176	167	143	1 74	F. L. Mahannah .....	800	4	40 00
Lorimor .....	587	9	204	180	134	2 11	M. I. Roberts .....	765	6	41 00
Lost Nation .....	500	9	178	168	134	1 36	G. E. Farley .....	720	8	34 00
Lovilla .....	511	8	162	143	98	1 62	W. J. VanDyke .....	520	3	36 00

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enumeration between 6 and 21 years in 1904.	Enrolled in school, 1903-1904.	Average attendance, 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Lowden .....	544	9	225	148	100	1 75	B. S. Longerbeam.....	\$ 540	8	\$38 88
Low Moor .....	818	9	117	99	69	1 90	L. Ella Lukens.....	495	2	37 50
Lucas .....	1132	9	551	849	848	1 89	J. W. Jackson.....	675	7	56 00
Luton .....	110	9	.....	.....	.....	.....	Miss E. Castille.....	315	1	85 00
LuVerne .....	534	9	216	174	140	1 81	S. Guiles .....	.....	4	41 25
Lynnville .....	347	9	.....	.....	.....	.....	A. T. Gifford.....	585	8	84 00
Macedonia .....	295	9	170	155	111	1 89	H. L. Callet.....	720	8	44 17
Macksburg .....	235	8	.....	.....	.....	.....	E. J. Hennessy.....	540	2	36 00
Madrid .....	1021	9	811	251	190	2 23	E. L. Meek .....	720	5	46 54
Magnolia .....	287	9	142	127	92	1 47	C. C. Knoll.....	495	2	40 00
Malcom .....	904	9	134	132	124	99	S. H. Wood.....	700	4	46 00
Maloy .....	210	8	42	40	38	2 12	Anna Jordan.....	820	1	80 00
Malvern .....	1186	9	404	321	259	1 75	L. D. Salisbury.....	1000	7	48 00
Manilla .....	778	9	382	248	238	1 90	J. C. Richter.....	810	7	46 43
Manly .....	359	9	123	95	80	1 62	G. C. Clemmer.....	450	2	35 00
Manning .....	1169	9	432	434	361	1 40	C. J. Johnson.....	1000	12	48 34
Manson .....	1424	9	440	434	326	1 67	G. W. Young.....	1100	9	46 48
Mapleton .....	1069	9	396	331	226	2 13	W. B. Buckley.....	1000	8	46 25
Marble Rock .....	573	9	.....	.....	.....	.....	L. E. Eickelberg.....	675	4	32 00
Marathon .....	659	8.2	254	238	214	1 87	E. C. Roberts.....	800	7	48 59
Marcus .....	718	9	302	157	123	2 05	E. A. Brinton.....	720	4	42 08
Marne .....	410	8	143	126	118	1 97	Irving Lynch.....	540	8	40 00
Martelle .....	.....	9	58	70	50	1 75	George Johnson.....	450	1	35 00
Martinsburg .....	332	8	108	108	86	1 57	W. S. Yeager.....	480	2	31 66
Marysville .....	322	8	153	128	88	1 85	Ollie Gilderboom.....	800	2	35 00
Massena .....	475	9	183	180	117	1 75	H. B. Hetzel.....	675	8	43 33
Maurice .....	240	9	65	69	48	2 70	Allan Van Wechel.....	450	2	40 00
Maxwell .....	810	9	311	265	187	1 58	C. W. Kirk.....	720	5	40 00
Maynard .....	495	9	100	130	108	1 67	A. G. Peaks.....	540	4	45 00
McGregor .....	1498	9.5	453	472	342	1 85	Josephine Harrison.....	.....	10	49 98
McIntire .....	427	9	191	164	111	1 40	E. M. Fox.....	495	3	33 33
Mechanicsville .....	703	9	202	210	152	1 64	Guy H. Scobey.....	720	5	46 00
Medapolis .....	725	9	249	233	199	1 81	T. M. Clevenger.....	810	6	45 00
Melbourne .....	86	9	154	125	83	2 05	U. G. Brown.....	540	3	37 00
Melrose .....	400	8	211	170	118	1 53	Anna M. Mahon.....	409	3	35 00
Menlo .....	428	9	159	160	121	1 87	James Lawrey.....	720	4	35 75
Meriden .....	432	9	102	118	89	2 24	W. O. Dailley.....	585	2	45 00
Merrill .....	389	9	181	122	88	2 19	R. T. Scott.....	630	4	47 50
Meservey .....	193	9	83	89	73	2 05	Elizabeth W. Russell.....	405	2	45 00
Miles .....	885	9	122	137	96	2 03	W. J. Hunt.....	720	3	40 00
Millford .....	485	8	179	164	81	3 33	E. D. Leonard.....	720	3	43 00
Millersburg .....	555	8	64	102	73	1 85	A. H. Cutler.....	489	2	37 50
Milo .....	585	9	219	212	160	1 81	P. M. Hersom.....	765	5	41 00
Malton .....	840	8	363	363	240	1 90	Frank Jarvis.....	800	6	41 00
Minburn .....	317	9	165	154	118	1 77	F. H. Figer.....	675	4	49 99
Minden .....	328	9	202	161	110	2 18	J. W. Atchley.....	675	4	41 25
Mitchell .....	245	9	144	158	103	1 99	H. E. La Rue.....	765	3	40 00
Mitchellville .....	768	9	235	201	159	1 41	Earnest Coad.....	720	3	47 08
Modale .....	384	7	161	122	92	1 47	Sue T. Faith.....	495	2	40 00
Monkona .....	384	7	75	53	35	1 53	Margaret Stepheney.....	390	1	30 00
* Monona .....	.....	8.5	183	120	64	1 22	John L. Cherney.....	.....	.....	.....
Mondamin .....	384	9	129	140	108	1 75	R. R. Wils n.....	675	3	41 67
Monmouth .....	241	9	113	142	104	1 58	E. R. Stoddard.....	585	3	36 70
Monona .....	674	9	234	221	178	1 65	C. S. Dadds.....	765	5	41 50
Monroe .....	917	8	231	165	161	1 78	C. T. Reed.....	720	6	40 86
Montezuma .....	1210	9	518	367	333	1 85	C. E. Douglass.....	1200	11	48 05
Montour .....	532	9	105	115	89	2 67	Viola Ward.....	630	3	40 00
Montrose .....	748	8	215	189	130	1 52	G. W. Kennedy.....	600	5	43 00
Moravia .....	632	8	241	232	182	1 30	T. B. Markbury.....	600	4	40 00
Morning Sun .....	948	9	327	320	266	1 72	L. T. Hill.....	1000	7	46 79
Morrison .....	176	9	56	65	48	1 88	Ida P. Richmond.....	450	.....	.....
Moscow .....	293	8	61	56	39	1 61	C. M. Ruff.....	.....	1	.....
Mt. Auburn .....	291	9	65	88	50	1 90	J. W. Jones.....	495	1	40 00
Mt. Etna .....	150	8	46	32	.....	.....	G. W. Shoemaker.....	294	1	28 08
Mt. Sterling .....	200	6	95	90	55	1 11	Paul E. Wright.....	320	1	30 00

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population census of 1900.	Number months school.	Enumeration between 5 and 21 years in 1904.	Enrolled in school, 1903-1904.	Average attendance, 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Mt. Union.....	276	9	78	74	51	\$ 1.63	J. W. Roberts.....	1	1	38 00
Monitton.....	1420	9	430	398	315	1.40	J. M. Stelle.....	1	10	65 00
Moville.....	507	9	200	192	167	1.25	J. F. Burgess.....	675	4	52 50
Murray.....	949	9	304	230	190	1.35	S. A. Reid.....	765	5	39 00
Nashua.....	1239	9	880	848	280	1.97	E. C. Hill.....	950	10	44 50
Nassau.....	87	8	72	76	57	1.67	O. W. Moore.....	428	1	40 00
Neola.....	921	9	406	240	179	2.30	J. M. Rapp.....	900	6	55 50
New Albin.....	548	8.5	220	171	134	1.28	C. E. Wright.....	595	2	32 00
New Boston.....	59	8	73	66	40	1.50	Joseph H. Reed.....	280	2	30 00
Newell.....	762	9	254	238	194	1.88	E. W. Vogel.....	810	1	47 50
New Hall.....	200	9	110	73	50	8.07	E. E. Steadman.....	495	1	45 00
New Hartford.....	5.0	9	185	176	138	1.90	Harry Eells.....	900	5	48 40
New London.....	1008	9	800	240	189	1.61	N. E. Johnson.....	720	6	39 00
New Market.....	600	9	229	229	146	1.49	R. E. Davenport.....	450	2	37 50
New Providence.....	268	9	189	100	69	2.10	Walter S. Nye.....	495	2	45 00
New Sharon.....	1252	9	406	323	311	1.82	John McPherson.....	810	1	46 25
New Virginia.....	453	9	181	124	91	1.62	John W. Agens.....	648	2	37 50
Nichols.....	398	9	141	118	87	1.18	C. L. Nyemaster.....	540	2	35 00
Nodaway.....	320	8	121	112	72	2.15	J. E. Cundy.....	630	3	35 00
Nora Springs.....	1209	9	347	382	273	1.59	E. F. Fisher.....	15	15	40 00
North English.....	683	9	817	812	243	1.29	J. R. McCollum.....	765	6	39 12
North McGregor.....	616	9.5	239	173	121	1.58	D. M. Cooper.....	665	3	40 00
Northwood.....	1271	9	423	420	309	1.40	I. L. Reed.....	800	7	40 00
Norwalk.....	287	8	105	94	60	1.58	Mrs. Rose Crow.....	400	1	45 00
Norway.....	583	9	205	102	98	2.23	A. W. Moore.....	750	3	40 00
Numa.....	207	9	114	86	72	1.07	Lenah Dorman.....	280	1	37 50
Odebolt.....	1432	9	481	394	310	2.03	Thos. B. Hutton.....	1500	11	45 50
Ocheyedan.....	599	9	216	218	165	1.53	J. R. Wilson.....	720	4	51 25
Oakland.....	913	9	438	352	255	1.63	I. D. Shuttleworth.....	810	7	44 06
*Oak Park.....	9	9	433	455	299	2.23	W. H. Mayne.....	810	13	49 79
Ogden.....	993	9	307	278	215	1.25	Clara E. Thompson.....	690	5	40 00
Ohla.....	692	9	255	204	164	2.00	T. J. Cowan.....	355	6	42 00
Oliva.....	238	8	104	101	53	1.47	Ed. Duree.....	400	1	35 00
Orient.....	869	9	146	172	112	1.78	R. W. Seeber.....	675	3	41 07
Onslow.....	238	9	88	99	74	1.10	F. E. Fowle.....	675	2	40 00
Orchard.....	116	9	78	61	44	1.68	Herbert L. Longley.....	465	1	35 00
Otley.....	271	3	91	74	44	1.93	A. vanderPloeg.....	405	1	40 00
Oto.....	396	9	192	204	204	2.09	Frank L. Kolb.....	720	4	52 40
Otranto.....	110	9	.....	.....	.....	.....	A. O. Green.....	405	1	35 00
Ossian.....	670	9.5	331	109	80	1.06	C. A. Russell.....	712	2	40 00
Orange City.....	1457	9	764	519	370	1.72	O. W. Herr.....	1000	18	40 43
Oxford.....	664	9	280	182	141	1.72	R. W. Sies.....	738	4	40 00
Oxford Junction.....	780	9	306	229	189	1.65	P. H. Paulson.....	720	5	38 50
Oxford Mills.....	141	.....	64	64	18	1.83	.....	.....	.....	.....
Pacific Junction.....	782	9	241	261	178	1.41	O. H. Marsh.....	720	4	42 50
Packwood.....	284	9	81	71	53	1.88	Mira Montgomery.....	450	1	40 00
Palmyra.....	105	8	56	56	55	1.41	W. E. Talbot.....	340	1	35 00
Palmer.....	120	6	92	95	80	1.89	M. A. Cromwell.....	405	2	42 80
Palo.....	176	9	73	67	48	2.00	H. M. Thompson.....	450	1	30 00
Panama.....	321	9	151	114	73	2.24	C. W. Bays.....	540	2	45 00
Panora.....	958	9	395	226	186	1.83	W. T. DeMar.....	810	8	50 25
Parkersburg.....	1164	9	355	297	253	1.59	O. E. Dixon.....	1040	7	42 86
Paton.....	323	9	110	176	112	1.62	J. F. Bradshaw.....	630	3	37 50
Patterson.....	168	9	116	124	57	1.44	Sylvia Westcott.....	390	1	30 00
Paulina.....	617	9	311	254	202	2.10	E. E. Martin.....	1000	7	43 93
Perris.....	361	9	15	135	88	2.11	Peter Jacobs.....	585	3	40 00
Peterson.....	521	9	140	177	132	1.8	E. G. Clarke.....	675	4	41 35
Pierces.....	358	9	189	170	145	1.56	James P. Daughton.....	675	5	49 66
Pilot Mound.....	315	9	116	98	68	1.64	E. E. Bentley.....	450	2	33 33
Plainfield.....	320	9	154	187	101	1.47	W. H. Gelvin.....	630	3	36 67
Pleasant Plain.....	290	8	.....	.....	.....	.....	Clara Grice.....	270	1	33 75
Pleasanton.....	164	8	85	98	63	1.25	Julia Mullin.....	400	1	35 00
Pleasantville.....	738	8	298	239	185	1.70	W. C. Kennedy.....	640	6	33 33
Plover.....	187	9	.....	.....	.....	.....	Mary K. Hobbs.....	585	3	44 66
Parnell.....	318	9	170	143	115	1.25	Mark Mullin.....	630	3	40 00

\*P. O. Des Moines. +\$427.50.

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enrollment between 9 and 21 years in 1904.	Enrolled in school 1903-1904.	Average attendance.	Average tuition per pupil for each month in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Plymouth.....	400	9	150	107	84	\$ 8 90	F. M. McClintock.....	\$ 522	12	\$38 75
Pocahontas.....	626	9	314	220	153	1 88	J. J. Rae.....	673	41	41 00
Polk City.....	493	8	195	25			Lewis H. Andrews.....	480	48	46 00
Pomeroy.....	910	8	800	270	238	1 98	O. Patton.....	765	46	46 88
Popejoy.....	160	9					G. H. Washburn.....	338	40	40 00
Portsmouth.....	816	9	190	85	57	3 77	Katie Griffin.....	540	45	45 08
Postville.....	994	9	411	284	248	1 52	A. Wilson.....	765	41	41 86
Pulaski.....	802	8	152	117	96	1 42	Arminta B. Nerry.....	400	30	30 00
Prairie City.....	808	9	800	108	145	2 07	H. E. Jones.....	730	47	47 00
Prairieburg.....	216	9	92	92	57	1 50	E. E. Brenneman.....	540	43	43 33
Prescott.....	446	9	161	183	106	2 51	J. A. Griffith.....	680	36	36 00
Preston.....	593	9	220	167	181	1 98	H. A. Stowell.....	765	44	43 00
Primghar.....	814	9	826	838	298	1 44	H. A. Mitchell.....	1000	44	44 86
Primrose.....	125	8	77	72	47	1 44	Gerald Dillavan.....	400	40	40 00
Princeton.....	456	9	144	120	85	1 63	J. T. Padgham.....	540	38	37 57
Promise City.....	251	8	111	150	90	1 41	J. S. Uim.....	480	35	35 06
Quasqueton.....	500	9	157	139	108	1 55	Anna E. Barrett.....	540	35	35 00
Quimby.....	800	9	92	92	59	2 43	Guy Olevenger.....	522	40	40 00
Radcliffe.....	645	9	214	216	165	1 94	C. F. Kuchne.....	810	44	44 00
Ralston.....	75	9	72	56	39	2 56	Emma Reese.....	540	38	38 06
Randall.....	117	9	66	53	23	1 62	Lulu Beamer.....	495	37	37 50
Randolph.....	873	9	160	171	188	2 24	Allan Peterson.....	675	47	47 00
Rathburn.....	270	9	162	92	61	1 81	Nina Mosby.....	360	40	40 00
Reasnor.....	200	8	76	51	19	2 43	F. S. Wright.....	320	32	32 50
Redding.....	811	8	108	98	77	1 72	E. W. Parker.....	400	35	35 00
Redfield.....	599	9	250	239	218	1 84	J. Pollock.....	675	60	60 50
Reinbeck.....	1203	9	431	323	251	2 18	C. O. Jameyson.....	900	46	47 50
Remsen.....	835	9	567	145	106	3 05	John Hays.....	630	51	51 25
Rhodes.....	476	9	221	171	158	1 82	F. D. Cutright.....	545	47	47 00
Ridgeway.....	850	9	183	128	105	1 90	A. L. Halstead.....	630	41	41 25
Riceville.....	804	9	185	235	200	1 46	Paul M. Roy.....	900	37	37 00
Richland.....	531	9	168	164	124	1 55	W. C. Hicks.....	585	37	37 50
Richmond.....	200	9	131	73	41	1 88	Ellen V. Walsh.....	405	32	32 22
Ridgeway.....	871	9	123	119	79	1 60	T. R. Cole.....	500	30	30 00
Rippey.....	895	9	165	162	124	1 65	H. A. Glackenmeyer.....	775	31	41 00
Riverside.....	698	9	178	99	79	2 47	H. H. Hankins.....	675	40	40 00
River Sioux.....	275	9					Bertha M. Dick.....	815	35	35 00
Riverton.....	637	9	247	202	154	1 63	C. V. Frasier.....	675	44	40 00
Rockford.....	1080	9	813	322	246	1 76	J. C. Sanders.....	1100	49	43 00
Rock Valley.....	1061	9	605	302	271	1 77	E. P. Crocker.....	720	46	46 08
Rockwell.....	880	9	222	130	110	2 31	Fred Mahannah.....	675	35	35 00
Rockwell City.....	1222	9	490	368	283	2 16	L. C. Bryan.....	900	11	47 27
Rodney.....	173	9	63	87	52	2 40	F. M. Guashee.....	450	2	37 50
Rodman.....	180	9	80	98	45	1 93	Josephine Patton.....	360	1	36 00
Roland.....	167	8	280	239	173	1 42	J. J. Scott.....	600	3	40 00
Rolfe.....	994	9	4 8	416	320	1 45	F. L. Cassidy.....	900	47	47 75
Rome.....	255	7	51	60	47	1 70	Carrie Campbell.....	240	40	40 00
Rose Hill.....	253	9	186	110	75	1 76	Frank Souther.....	430	41	41 33
Rowan.....	212	9	121	119	102	1 65	F. E. Whitney.....	450	43	43 50
Rowley.....	250	9	66	55	32	2 17	Mae L. Toomey.....	315	1	35 00
Rudd.....	831	9	109	92	73	1 71	Nellie C. Downs.....	367	2	32 50
Ruhneils.....	850	7	163	180	65	1 76	W. J. Bruner.....	815	3	38 33
Russell.....	638	9	186	207	141	1 64	S. W. Rowley.....	720	4	37 00
Ruthven.....	796	9	278	230	190	1 82	H. A. Walty.....	1000	5	39 20
Rutland.....	215	9	98	79	40	1 60	Lona Hughes.....	361	1	39 00
Ryan.....	170	9	130	104	24	1 51	Izbie Graves.....	450	3	35 00
Sabula.....	1029	9	311	256	223	1 80	Eva M. Flemming.....	810	3	39 50
St. Anthony.....	114	9	78	77	64	1 56	Mary Harrington.....	405	1	40 00
St. Ansgar.....	695	9	221	183	149	1 85	John P. Lund.....	630	3	36 00
St. Charles.....	412	9	183	170	132	1 24	Wm. Miller.....	800	4	31 25
St. Olaf.....	124	8	73	70	39	1 25	Amy Himes.....	260	1	30 00
Salem.....	548	6.5	155	123	95	1 96	F. A. Hill.....	540	4	30 00
Salix.....	387	9					LeRoy Anderson.....	540	3	44 67
Sanborn.....	1247	9	432	363	296	1 90	J. J. Billingsly.....	1020	10	44 50
Savannah.....	78	8	135	101	41	82	W. L. Evans.....	240	2	39 37
Schleswig.....	233	9	181	105	69	2 03	F. N. Olney.....	630	3	45 00

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enumeration between 5 and 21 years in 1904.	Enrolled in school, 1903-1904.	Average attendance, 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Schaller	661	9	185	214	216	\$ 1 52	H. C. Coe	\$ 720	5	\$42 50
Seranton	983	9	263	356	216	1 45	W. W. Bell	810	6	44 00
Searsboro	263	8	102	95	53	2 49	Ernest Tinkle	400	2	35 00
Sergeant Bluff	900	9	276	271	185	1 75	R. H. Sylvester	675	5	43 00
Shannon City	380	9	149	149	99	1 81	O. W. Hunt	675	8	40 00
Sharpsburg	150	8	70	63	40	2 13	Nina Wainright	450	2	40 00
Shelby	688	9	220	223	171	1 75	J. F. Dodder	765	5	43 00
Sheldahl	692	9	239	231	178	2 24	Benj. Boardman	900	7	47 14
Shellrock	179	8	79	80	54	1 67	Mary E. Hardy	400	1	40 00
Shellsburg	839	9	220	243	220	1 50	J. J. Sharpe	765	6	46 67
Sibley	511	9	191	152	122	1 70	M. R. Fayrum	630	3	40 00
Sidney	1280	9	508	443	340	1 97	L. B. Parsons	1200	11	46 11
Silver City	1143	9	522	500	434	1 44	A. C. Fuller	1000	12	38 68
Sioux Center	438	9	130	138	125	1 72	J. K. Graham	675	3	46 47
Sioux Rapids	810	9 5	311	240	196	1 50	J. L. Latta	900	5	42 50
Slaters	1005	9	531	295	207	2 00	P. L. Dowland	650	5	40 00
Sloan	426	9	147	140	108	2 24	A. O. Wydel	785	9	49 22
Sloans	643	9	320	291	220	1 80	J. E. Veit	720	6	46 67
Smithland	455	9	231	237	167	1 34	J. S. Shoup	480	3	38 33
Solon	397	8	133	133	118	1 48	J. W. Weber	440	2	32 00
South English	319	8	106	102	69	1 77	George Horrace	450	1	30 00
Spillville	356	9 5	183	81	47	1 73	Stephen Krueck	1000	10	42 50
Spirit Lake	1219	9	421	403	276	1 94	R. S. Whitely	900	4	47 50
Springdale	509	9	151	151	119	2 44	T. W. Hicks	630	4	37 50
Snow Hill	9	9	198	180	154	1 43	E. A. Woodrow	405	1	35 00
Spring Hill	126	9	89	52	54	1 51	Howard Reed	720	6	37 50
Springville	599	9	194	213	183	1 70	J. E. Kicke	675	1	43 83
Stacyville	490	9	220	91	68	3 23	Oscar Mueller	450	2	37 50
Stanhope	279	9	113	105	71	1 26	Fred C. Runkle	595	3	47 00
Stanton	404	8 5	265	188	170	1 16	C. E. Hill	675	4	44 75
Stanwood	415	9	185	143	108	2 35	P. S. Filer	900	7	47 00
State Center	1008	9	327	281	237	1 81	E. N. Gibson	585	3	43 33
Steamboat Rock	410	9	136	119	87	2 12	O. B. Chassell	500	1	40 00
Stockton	180	10	61	59	39	1 61	E. L. Ferrier	630	3	40 00
Story City	1197	9	458	350	292	1 08	Julia Hagen	700	3	40 00
Stratford	458	9	190	151	114	1 65	J. M. Holaday	900	5	38 00
Strawberry Point	1012	9	274	232	182	1 54	J. F. Trotter	1000	7	38 50
Summer	1437	9	502	406	262	1 43	T. J. Durant	450	1	40 00
Superior	187	9	72	80	60	1 50	M. R. Powers	950	5	45 00
Sutherland	722	9	290	249	240	1 38	F. E. Teller	320	3	40 00
Somers	100	8	79	56	35	1 24	Flornice Sayles	675	3	40 00
Swea City	322	9	136	125	93	1 75	O. A. Smith	400	2	40 00
Swan	406	8	152	125	81	1 60	Walter E. Wellons	540	1	50 00
Swaledale	240	9	112	80	62	1 83	Lucien Stivers	720	9	42 75
Tabor	934	9	575	310	214	1 96	G. U. Gordon	850	1	55 00
Templeton	321	9	194	35	24	2 06	W. H. Lamm	540	3	41 07
Thayer	394	8	76	71	47	1 71	W. H. Golly	280	1	35 00
Thompson	450	9	161	140	108	1 85	J. V. Starratt	450	2	37 75
Thor	274	7	81	64	40	2 91	H. S. McVicker	585	3	44 83
Thornburg	267	9	88	94	22	1 77	F. H. Sunderlin	720	5	43 00
Thornton	299	9	164	148	112	1 88	H. C. Brown	720	4	35 00
Thurman	409	9	169	164	150	1 50	Charles Murray	1000	9	43 42
Tingler	488	9	174	185	168	1 58	E. C. Meredith	480	1	40 00
Traer	1458	9	417	388	317	1 72	W. S. Dey	630	2	40 00
Trenton	182	8	94	93	58	2 01	E. A. French	240	2	31 25
Tripoli	665	9	201	180	118	1 84	W. H. Russell	360	2	35 00
Troy	200	8 5	77	61	34	1 90	Katherine Carman	270	2	40 00
Truro	58	8	99	58	38	1 51	Millie E. Smith	720	5	44 40
Udell	75	6	119	113	80	1 75	A. S. Fulton	590	2	35 00
Underwood	200	8	145	118	91	1 40	A. Farnsworth	495	2	29 00
Union	589	9	205	214	172	1 70	E. E. Bowen	675	4	41 25
Unionville	211	8	139	136	100	2 00	F. F. Gordon	800	4	39 75
Urkana	323	8 5	129	108	73	1 61	E. Robinson	585	3	44 17
Uto	407	9	215	168	141					
Vail	578	9	245	109	97					
Van Horne	484	9	193	160	123					

## GRADED SCHOOLS—CONTINUED.

NAME OF TOWN.	Population, census of 1900.	Number months school.	Enumeration between Sept 21 and 21 years in 1904.	Enrolled in school 1903-1904.	Average attendance, 1903-1904.	Average tuition per month for each scholar in average attendance.	NAME OF SUPERINTENDENT OR PRINCIPAL, 1903-1904.	Annual salary.	Number of other teachers.	Average salary per month of assistant teachers.
Van Meter.....	407	9	245	182	117	\$ 2 09	F. L. Douglas .....	\$ 785	7	\$52 85
Van Wert.....	306	8	146	165	128	1 87	F. P. Reed.....	600	3	53 33
Varina.....	150	8	57	48	26	2 83	Mrs. O. W. Dresser.....	333	1	52 00
Victor.....	612	9	179	209	173	2 10	W. I. Griffith.....	675	5	54 50
Volga.....	474	9	157	148	120	1 46	W. J. Tighe.....	630	1	51 66
Walcott.....	962	10	162	129	82	2 01	B. A. Sutterman.....	600	3	52 50
Walker.....	505	9	212	160	133	1 42	A. B. Alderman.....	675	5	58 00
Wall Lake.....	659	9	234	196	157	1 84	M. R. Timmerman.....	720	4	40 00
Walnut.....	878	9	351	608	246	1 80	G. O. Van Meter.....	1000	7	48 00
Wapello.....	1398	7.7	275	238	134	2 71	John W. McCulloch.....	900	8	44 44
Washta.....	431	9	159	136	104	2 11	G. L. Martin.....	765	3	43 33
Waucoma.....	540	9	211	167	127	1 30	R. J. Brettnall.....	540	4	41 25
Waukeo.....	292	9	136	130	101	1 68	Will Shirley.....	540	4	42 50
Wayland.....	394	8.5	187	153	111	1 80	J. W. Pierce.....	600	3	40 00
Webb.....	200	9	72	75	51	1 83	Mary Oliphant.....	450	1	45 00
Weedland.....	.....	9	.....	.....	.....	.....	Madge Evans.....	360	2	40 00
Weldon.....	363	8	132	132	125	1 85	A. N. Smith.....	600	3	36 66
Wellman.....	654	9	175	178	146	1 75	M. E. Logan.....	810	4	41 25
Wesley.....	730	9	214	140	104	2 08	G. E. Mueller.....	675	4	46 66
Weston.....	109	8	46	50	45	1 62	Helen Allen.....	280	2	37 50
West Bend.....	538	9	226	139	110	2 50	George P. Koebel.....	630	5	43 00
West Branch.....	647	9	257	237	192	1 82	S. H. Mott.....	900	6	42 00
West Burlington.....	1044	9.5	553	281	253	98	Annie Hogan.....	540	5	41 00
West Chester.....	209	9	72	65	46	1 60	Rose Mintier.....	*	1	32 50
Westgate.....	260	9	82	47	39	1 93	Latta Turner.....	450	1	37 50
West Grove.....	140	7	50	52	42	1 21	{ Blanche Gibson..... } { J. F. Treasure..... }	175	2	39 50
West Point.....	.....	9	241	57	31	3 98	Eugene Sloat.....	450	2	36 25
West Side.....	396	9	166	146	118	2 25	E. D. Lewis.....	720	4	45 00
Wheatland.....	475	9	202	134	109	1 85	E. T. Housh.....	675	3	39 16
Whiting.....	572	9	360	196	154	2 42	G. L. Weaver.....	720	6	41 00
Whitten.....	217	8	.....	.....	.....	.....	Nelle Wall.....	336	1	58 00
Whittemore.....	522	9	212	91	68	2 79	A. C. Joy.....	675	3	41 66
Williams.....	500	9	206	185	116	2 22	J. T. Bradshaw.....	700	4	45 00
Williamsburg.....	1100	9	349	370	295	1 70	Bruce Frances.....	1800	8	45 70
Willow Glenn.....	.....	9	87	94	65	2 02	L. E. Worley.....	540	2	37 50
Wilton.....	1233	9	361	322	262	1 83	L. G. Focht.....	1100	6	40 83
Winchester.....	100	9	88	38	20	2 10	M. L. Swearingen.....	400	.....	.....
Winfield.....	820	9	273	209	223	1 52	D. H. Barton.....	765	6	42 50
Winthrop.....	618	9	253	180	130	1 53	J. O. Murphy.....	675	3	41 67
Wota.....	218	9	90	90	57	2 19	S. M. Kirkland.....	450	2	38 50
Woodbine.....	1255	10	440	572	393	1 60	Kinney and Reed.....	2800	9	53 43
Woodburn.....	467	8	140	120	80	1 60	Mamie Zaelke.....	400	3	40 00
Woden.....	.....	8	.....	.....	.....	.....	H. F. Freeman.....	288	1	34 00
Woolstock.....	274	9	77	82	51	2 38	W. S. Boyer.....	540	3	46 67
Woodward.....	550	9	182	173	148	1 41	Anna Boden.....	400	5	30 75
Wyoming.....	794	9	241	223	166	1 80	Byron J. Read.....	810	5	44 00
Yale.....	300	9	117	130	116	1 75	O. G. Hamilton.....	450	3	40 00
Zearing.....	388	9	167	150	125	1 84	George Failor.....	540	4	48 75
Zwingle.....	100	9	18	.....	.....	.....	Lottie Brouillard.....	300	.....	.....

## SPECIAL LIBRARY REPORT.

COUNTIES.	Number of volumes in the libraries.	Amount of money expended from district funds for library books.	Amount expended raised by volun- tary efforts.	Volumes purchased during the year.	Number rural schools provided with suit- able library cases.	Number subdistricts provided with libraries.	Number independent districts provided with libraries.
Adair .....	4083	\$ 172 96	\$ 96 29	668	52	97	1
Adams .....	2204	42 66	.....	78	49	65	30
Allamakee .....	5242	182 79	75 00	98	115	40	75
Appanoose .....	4045	177 23	48 45	580	96	78	14
Audubon .....	2985	198 04	.....	857	90	106	.....
Benton .....	10763	247 68	112 42	806	85	82	86
Black Hawk .....	9659	423 06	122 06	2770	76	49	13
Boone .....	11053	830 64	61 81	668	72	92	47
Bremser .....	7901	110 38	97 50	407	74	39	49
Buchanan .....	6498	901 57	190 86	678	55	77	55
Buena Vista .....	16168	188 89	50 00	1141	182	125	7
Butler .....	6829	224 70	45 15	744	70	96	38
Calhoun .....	12382	507 91	800 00	935	94	133	.....
Carroll .....	4189	128 20	41 25	518	28	55	2
Cass .....	7937	819 81	110 19	642	57	120	7
Cedar .....	7537	282 29	41 06	564	66	92	23
Cerro Gordo .....	7186	238 44	.....	668	77	100	20
Cherokee .....	17276	190 08	409 94	1977	128	126	7
Chickasaw .....	4678	95 80	37 50	450	40	17	49
Clarke .....	2205	123 25	.....	97	8	78	24
Clay .....	7807	169 23	16 50	833	63	121	.....
Clayton .....	8078	406 19	65 46	725	85	80	15
Clinton .....	6854	706 08	98 40	1284	90	130	24
Crawford .....	5602	251 97	98 58	864	46	111	.....
Dallas .....	6515	704 86	.....	1404	97	108	16
Davis .....	2294	.....	.....	.....	50	34	52
Decatur .....	3159	228 15	85 75	416	21	59	85
Delaware .....	5899	273 95	.....	699	121	111	10
Des Moines .....	2916	70 74	13 30	163	9	25	86
Dickinson .....	4338	170 88	47 80	473	19	10	1
Dubuque .....	7048	860 00	143 66	1850	85	57	52
Emmet .....	6789	79 84	.....	2754	74	71	.....
Fayette .....	12027	153 85	800 00	1000	170	108	69
Floyd .....	7954	247 00	126 00	634	86	86	10
Franklin .....	6321	232 72	44 05	454	68	102	23
Fremont .....	6429	249 69	132 39	770	100	94	11
Greene .....	4291	151 48	5 80	255	76	81	2
Grundy .....	4116	58 58	.....	172	78	75	29
Guthrie .....	4946	221 94	.....	468	56	110	4
Hamilton .....	4442	.....	.....	.....	180	107	25
Hancock .....	5453	241 49	205 91	980	78	124	.....
Hardin .....	6023	514 09	84 00	1198	45	76	55
Harrison .....	4172	137 75	159 81	718	15	17	5
Henry .....	6729	172 22	304 26	796	60	82	64
Howard .....	4021	160 28	74 60	432	82	92	7
Humboldt .....	7533	163 50	258 26	900	59	78	14
Ia .....	7881	.....	.....	.....	86	86	.....
Iowa .....	9830	445 18	241 27	1065	85	761	86

## SPECIAL LIBRARY REPORT—CONTINUED.

COUNTIES	Number of volumes in the library.	Amount of money expended from district funds for library books.	Amount expended raised by voluntary efforts.	Volumes purchased during the year.	Number rural schools provided with suitable library cases.	Number subdistricts provided with libraries.	Number independent districts provided with libraries.
Jackson.....	3910	26 41	8 50	83	54	36	18
Jasper.....	5271	272 55	21 50	525	114	133	16
Jefferson.....	3295	159 99	51 00	963	45	70	21
Johnson.....	10322	314 07	75 00	915	58	79	41
Jones.....	9686	296 33	45 95	655	100	70	47
Keokuk.....	7691	520 91	118 25	811	51	24	100
Kossuth.....	6067	350 00	144 50	690	52	141	.....
Lee.....	6258	246 83	10 17	418	80	47	23
Linn.....	14078	746 00	96 40	956	104	106	68
Louisa.....	5468	297 10	118 75	543	50	62	17
Lucas.....	3402	269 96	88 11	711	45	33	58
Lyon.....	6008	123 09	68 00	401	51	74	10
Madison.....	3455	117 88	24 42	439	75	117	15
Mahaska.....	6130	854 63	89 10	778	30	60	59
Marion.....	5739	280 80	175 90	459	16	18	91
Marshall.....	7769	1309 85	.....	1570	55	69	40
Mills.....	10292	267 18	9 98	473	70	19	57
Mitchell.....	10688	.....	.....	983	84	47	37
Monona.....	8698	223 02	55 00	508	48	94	20
Monroe.....	2721	251 83	65 00	100	20	42	23
Montgomery.....	4661	193 40	27 00	383	.....	.....	.....
Muscatine.....	4324	95 79	.....	206	.....	.....	.....
O'Brien.....	17316	127 86	481 00	1098	126	131	.....
Oscola.....	9935	85 00	275 00	680	86	88	.....
Page.....	5340	276 37	80 00	775	76	83	88
Palo Alto.....	1810	244 70	200 00	709	124	124	.....
Plymouth.....	9183	870 94	64 57	757	78	147	1
Pocahontas.....	11665	85 92	490 74	715	83	116	8
Polk.....	13900	484 23	57 60	959	65	70	96
Pottawattamie.....	9629	586 08	50 00	1179	235	226	15
Poweshiek.....	10390	388 85	234 06	1028	46	90	8
Ringgold.....	8932	223 09	101 06	430	61	78	29
Sac.....	8179	102 84	510 30	2050	90	125	.....
Scott.....	11837	617 90	.....	981	64	76	23
Shelby.....	10878	297 19	500 00	1409	135	135	.....
Sioux.....	9422	477 30	83 35	1127	85	162	2
Story.....	7118	300 00	75 00	.....	114	65	.....
Tama.....	7321	450 69	24 00	825	75	95	70
Taylor.....	8320	.....	.....	.....	45	.....	.....
Union.....	5082	259 64	.....	566	29	106	18
Van Buren.....	3204	108 66	.....	236	26	62	54
Wapello.....	8252	348 46	55 44	1048	56	54	29
Warren.....	9069	.....	.....	.....	62	50	65
Washington.....	11778	246 90	575 00	4181	79	50	84
Wayne.....	4320	210 63	60 00	456	25	84	23
Webster.....	15785	293 71	239 94	964	126	134	86
Winnebago.....	4218	224 88	.....	593	48	75	5
Winnechick.....	7172	391 82	94 06	1209	88	98	39
Woodbury.....	8946	159 06	72 00	450	55	75	15
Worth.....	8548	163 15	17 00	268	48	87	.....
Wright.....	11153	267 44	147 00	1062	122	120	8
Total.....	714492	25548 81	10489 26	78476	6821	8119	2588

## HIGH SCHOOL STATISTICS.

CITIES AND TOWNS OF OVER 1,000 IN POPULATION BY CENSUS OF 1900.

1903-1904.							1903-1904.									
NAME OF SCHOOL.	Years in course.	Years in Latin.	Enrollment entire year.			Graduates.	NAME OF SCHOOL.	Years in course.	Years in Latin.	Enrollment entire year.			Graduates.			
			Boys.	Girls.	Total.					Boys.	Girls.	Total.				
Ackley .....	4 1/2		26	35	61	8	4	7	Fairfield .....	4 1/2	62	106	168	9	8	17
Adel .....	4 1/2		36	52	88	2	6	7	Farmington .....	4 1/2	16	35	51	7	7	14
Afton .....	4 1/2		18	30	48	...	...	...	Fayette .....	4 1/2	24	32	56	4	4	8
Akron .....	4 1/2		20	26	46	1	8	6	Fonda .....	4 1/2	5	10	15	4	10	14
Albia .....	4 1/2		61	95	156	6	14	20	Forest City .....	4 1/2	26	32	61	5	7	12
Algona .....	4 1/2		55	62	117	6	8	12	Fort Dodge .....	4 1/2	96	152	248	9	24	33
Alton .....	4 3/4		6	11	17	...	...	...	Fort Madison .....	4 1/2	61	98	159	4	16	20
Ames .....	4 1/2		69	76	144	2	6	16	Fraser .....	2 1/2	18	31	49	...	...	...
Anamosa .....	4 1/2		...	...	142	6	13	15	Garner .....	4 1/2	86	44	130	8	10	18
Atlantic .....	4 1/2		74	102	176	6	13	21	Glenwood .....	4 1/2	87	66	153	1	9	10
Auburn .....	4 1/2		30	49	79	4	4	8	Grand Junction .....	4 1/2	19	28	47	1	4	5
Avoca .....	4 1/2		36	40	76	2	6	7	Greene .....	4 1/2	26	28	54	1	1	2
Bedford .....	4 1/2		49	57	106	4	7	11	Greenfield .....	4 1/2	81	44	125	...	...	...
Belle Plaine .....	4 1/2		50	73	123	4	7	11	Grinnell .....	4 1/2	106	156	262	14	22	36
Bellevue .....	3 1/2		2	24	26	6	8	13	Grundy Center .....	4 1/2	59	61	120	4	7	11
Belmond .....	4 1/2		...	...	...	8	4	7	Guthrie Center .....	4 1/2	23	37	60	4	6	10
Bloomfield .....	4 1/2		84	85	169	8	5	8	Guttenburg .....	4 1/2	14	20	34	8	4	7
Boone .....	4 1/2	1 1/2	178	284	462	10	19	29	Hamburg .....	4 1/2	29	44	73	...	...	...
Britt .....	4 1/2		21	31	52	4	4	8	Hampton .....	4 1/2	62	69	131	...	...	...
Brooklyn .....	4 1/2		3	47	50	6	6	14	Harlan .....	4 1/2	8	96	104	...	...	...
Burlington .....	4 1/2	1 3/4	284	418	702	12	26	40	Hartley .....	4 1/2	28	42	70	1	1	2
Calmar .....	3 1/2		16	25	41	2	7	9	Hawarden .....	4 1/2	54	4	58	...	...	...
Carroll .....	4 1/2		59	68	127	8	7	12	Hedrick .....	4 1/2	16	35	51	8	6	14
Cedar Falls .....	4 1/2		59	94	153	12	25	37	Hiteman .....	4 1/2	26	40	66	...	...	...
Cedar Rapids .....	4 1/2	2 1/2	406	674	1080	14	30	44	Humboldt .....	4 1/2	38	64	102	...	...	...
Centerville .....	4 1/2		81	148	229	9	27	36	Ida Grove .....	4 1/2	59	169	228	16	14	30
Chariton .....	4 1/2		50	96	146	8	16	24	Independence .....	4 1/2	8	119	127	...	...	...
Charles City .....	4 1/2		73	141	214	11	21	32	Indianola .....	4 1/2	8	112	120	18	11	29
Cherokee .....	4 1/2		71	96	167	11	9	20	Iowa City .....	4 1/2	140	308	448	22	34	56
Cincinnati .....	4 1/2		40	39	79	1	4	5	Iowa Falls .....	4 1/2	60	69	129	7	14	21
Clarinda .....	4 1/2		...	...	98	...	...	...	Jefferson .....	4 1/2	6	94	100	...	...	...
Clarion .....	4 1/2		41	57	101	2	7	9	Keokuk .....	4 1/2	189	180	369	16	28	44
Clear Lake .....	3 1/2		22	34	56	6	6	12	Keosauqua .....	4 1/2	30	33	63	4	6	10
Clinton .....	4 1/2		98	176	274	14	26	39	Knoxville .....	4 1/2	48	75	123	9	10	19
Colfax .....	4 1/2		8	21	29	3	9	12	Lake City .....	4 1/2	...	...	...	...	...	...
Columbus Jct. .....	4 1/2		3	4	7	2	8	10	Lake Mills .....	4 1/2	19	31	50	8	1	9
Coon Rapids .....	4 1/2		27	36	63	3	8	11	Lamoni .....	4 1/2	47	20	67	1	8	4
Corning .....	4 1/2		49	81	130	6	15	21	Lansing .....	4 1/2	26	35	61	...	...	...
Corydon .....	4 1/2		89	72	161	11	4	15	La Porte City .....	3 1/2	25	38	63	5	5	15
Council Bluffs .....	4 1/2		219	363	582	23	39	62	Le Mars .....	4 1/2	57	74	131	8	8	16
Cresco .....	4 1/2		24	46	70	7	15	22	Lenox .....	4 1/2	21	49	70	...	...	...
Creston .....	4 1/2	1 1/2	130	301	431	7	27	34	Leon .....	4 1/2	6	14	20	6	12	18
Davenport .....	4 1/2		315	536	851	21	59	80	Logan .....	3 1/2	20	44	64	8	7	15
Decorah .....	4 1/2		50	51	101	1	15	16	Lucas .....	3 1/2	9	26	35	8	10	18
Denison .....	4 1/2		4	85	89	2	18	20	Malvern .....	4 1/2	19	37	56	3	3	6
Des Moines, E. .....	4 1/2	2 1/2	378	531	909	12	31	43	Manchester .....	4 1/2	69	71	140	5	4	9
Des Moines, W. .....	4 1/2		335	459	794	23	3	26	Manning .....	4 1/2	219	240	459	4	5	9
De Witt .....	3 1/2		1	22	23	2	6	8	Manson .....	3 1/2	34	36	70	5	16	21
Dubuque .....	4 1/2	2 1/2	261	278	539	10	25	35	Mapleton .....	4 1/2	18	29	42	1	6	7
Dunlap .....	4 1/2		2	37	39	1	3	4	Maquoketa .....	4 1/2	47	81	128	11	17	28
Dyersville .....	2 1/2		12	11	23	...	...	...	Marango .....	4 1/2	48	65	113	6	12	18
Eagle Grove .....	4 1/2		60	75	135	11	11	22	Marion .....	4 1/2	86	116	202	16	28	44
Edgelyville .....	4 1/2		25	40	65	2	4	6	Marshalltown .....	4 1/2	...	...	...	...	...	...
Edon .....	4 1/2		25	31	56	4	8	12	Mason City .....	4 1/2	84	128	212	11	33	44
Eldora .....	4 1/2		41	64	105	5	7	12	Missouri Valley .....	4 1/2	67	98	165	5	9	14
Emmetsburg .....	4 1/2		32	54	86	4	8	12	Montezuma .....	4 1/2	41	49	90	5	4	9
Etherville .....	4 1/2		48	68	116	1	2	3	Monticello .....	4 1/2	50	78	128	9	19	28

### REPORT OF COUNTY SUPERINTENDENTS.

### HIGH SCHOOL STATISTICS—CONTINUED.

1903-1904.									1903-1904.								
NAME OF SCHOOL.	Years in course.	Years in Latin.	Enrollment entire year.			Grad- uates.			NAME OF SCHOOL.	Years in course.	Years in Latin.	Enrollment entire year.			Grad- uates.		
			Boys.	Girls.	Total.	Boys.	Girls.	Total.				Boys.	Girls.	Total.	Boys.	Girls.	Total.
Mt. Ayr.....	4	4	37	49	86	8	7	15	Sibley.....	4	4	38	58	91	8	7	12
Mt. Pleasant.....	4	4	45	68	113	5	8	13	Sidney.....	4	4	28	46	69	5	7	10
Mt. Vernon.....	4	4	29	22	51	1	1	2	Sigourney.....	4	4	25	35	55	2	14	16
Moulton.....	4	4	25	47	72	1	1	2	Sioux City.....	4	4	255	375	628	11	88	54
Muscatine.....	4	4	97	135	232	14	23	37	Sioux Rapids.....	4	4	24	21	45	6	6	6
Mystie.....	4	1 1/2	6	10	16				Spencer.....	4	4	39	77	116	3	12	18
Nashua.....	4	4	36	48	84	7	11	18	Spirit Lake.....	4	4	25	40	65	6	6	11
Nevada.....	4	4	44	77	121	6	18	19	State Center.....	4	4	12	27	39	1	9	10
New Hampton.....	4	4	38	82	91	2	9	11	Storm Lake.....	4	4	4	56	108	13	1	22
New London.....	4	3	9	1	24	4	5	9	Stuart City.....	4	4	18	22	35	2	2	2
New Sharon.....	4	4	16	48	64	4	5	9	Stuart.....	4	4	54	54	108	1	4	12
Newton.....	4	4	62	94	156	18	18	26	Summer.....	4	1	3	34	70	7	1	12
Nora Springs.....	4	4	90	9	184	1	1	2	Tama.....	4	4	28	41	64	1	7	8
Northwood.....	4	4	29	41	70	4	5	9	Tipton.....	4	4	44	54	98	5	6	11
Odebolt.....	4	3 3/4	31	41	72	3	6	12	Toledo.....	4	4	44	66	110	6	11	17
Oelwein.....	4	4	55	74	129	6	15	18	Traer.....	4	4	2	4	67	8	1	13
Onawa.....	4	4	48	55	103	8	11	16	Valley Junction.....	4	4	33	53	88	1	7	7
Orange City.....	4	4	19	29	48	1	3	4	Villisca.....	4	4	81	62	145	8	10	14
Osage.....	4	4	47	86	133	7	11	17	Vinton.....	4	4						
Osceola.....	4	4	47	67	114	8	11	14	Wapello.....	4	4	27	55	88	6	11	16
Oskaloosa.....	4	4 1/2	140	70	310	17	23	44	Washington.....	4	4	81	117	198	1	13	30
Ottumwa.....	4	4	138	177	415	11	52	70	Waterloo, E.....	4	4	99	143	242	17	2	38
Parkersburg.....	4	4	29	248	74	3	7	10	Waterloo, W.....	4	4	78	124	202	6	1	17
Pella.....	4	3	37	35	72	8	7	15	Waukon.....	4	4	82	45	77	8	1	17
Perry.....	4	4	61	89	150	8	11	16	Waverly.....	4	4	26	40	73	1	10	11
Red Oak.....	4	4	107	151	308	14	18	32	Webster City.....	4	4	64	101	165	4	7	11
Reinbeck.....	4	4	24	45	67	2	12	14	West Branch.....	4	3	35	45	80	8	8	12
Rockford.....	4	4							West Liberty.....	4	4	44	54	99	9	9	18
Rock Rapids.....	4	4	34	32	6	2	2	2	West Union.....	4	4	47	55	105	8	8	11
Rock Valley.....	4	4	16	32	4	2	9	9	What Cheer.....	4	3	21	36	60	4	14	18
Rockwell City.....	4	4	21	41	6	1	8	6	Williamsburg.....	4	3	39	46	87	8	10	18
Sabula.....	3	3	25	36	61	5	14	18	Wilton.....	4	3			67	8	9	6
Sac City.....	4	4	34	62	96	8	1	8	Winterset.....	4	4	36	66	10	2	1	19
Sanborn.....	4	4	31	50	81	5	8	11	Woodbine.....	4	4	122	135	257	7	8	12
Seymour.....	4	2	16	41	57	1	1	2									
Sheldon.....	4	4	54	88	142	6	16	26	Total.....			1854	2808	4347	206	400	603
Shenandoah.....	4	4	57	90	155	17	12	21									

## ABSTRACT [A]—REPORT OF COUNTY SUPERINTENDENT, 1905.

## SCHOOL STATISTICS.

Counties.	Districts.		Schools.		Teachers.		Pupils.				Persons 7 to 14 years not attending school.					
	School townships.	Independent districts.	No. sub-districts.	No. of rooms in rural schools.	No. of school rooms in cities and towns.	Average duration in months.	Number employed.		Average monthly compensation.			Between the ages of 5 and 21 years.		Ages of 7 to 14 years inclusive.		
							Males.	Females.	Males.	Females.		Males.	Females.	Males.	Females.	
Adair.....	15	15	127	133	27	8.8	41	281	40.7	83.4	2,048	2,478	1,287	1,883	29	34
Adams.....	9	53	77	104	55	8.2	52	201	47.57	33.82	2,008	1,99	1,041	1,099	7	7
Allamore.....	9	71	85	129	56	7.2	54	209	49.19	26.74	2,167	2.98	1,599	1,543	11	7
Appanoose.....	13	85	98	122	81	7.1	46	235	48.24	23.88	4,092	4,856	2,606	2,410	116	122
Audubon.....	13	8	106	104	35	8.2	27	201	43.99	86.68	2,319	2,846	1,870	1,803	15	9
Benton.....	10	92	89	167	69	8.3	45	227	49.64	84.87	3,893	3,705	1,908	1,998	26	23
Black Hawk.....	10	63	78	136	116	7.9	51	350	52.43	23.66	4,605	5,832	2,780	2,698	28	23
Boone.....	1	62	92	100	81	7.9	51	318	43.53	24.89	4,835	4,274	2,264	2,265	23	30
Bremer.....	6	64	87	133	51	7.6	12	118	43.08	22.78	2,664	2,807	1,432	1,896	21	20
Buchanan.....	9	65	77	133	61	8.2	32	215	44.98	24.01	3,985	2,546	1,610	1,896	15	14
Buena Vista.....	15	14	117	135	40	8.2	37	265	41.16	26.21	2,779	2,601	1,453	1,871	61	57
Butler.....	11	48	91	137	44	8.2	37	268	45.89	26.46	2,948	2,897	1,613	1,878	77	80
Calhoun.....	16	9	123	133	55	8.8	27	297	53.81	84.14	2,973	3,794	1,585	1,850	28	17
Carroll.....	14	29	115	124	53	8.9	41	245	45.80	24.37	2,813	2,491	1,028	1,550	26	27
Cass.....	15	17	126	140	54	8.5	33	213	49.41	26.64	2,682	2,893	1,105	1,116	26	12
Cedar.....	12	41	136	133	44	8.2	40	233	53.07	25.93	3,077	2,893	1,021	1,021	11	12
Cedar Grove.....	13	30	102	187	74	8.1	33	290	41.19	26.62	2,526	2,893	1,021	1,021	24	14
Cherokee.....	15	15	126	181	43	8.2	39	272	49.11	26.37	2,634	2,515	1,021	1,021	12	17
Ciawataw.....	5	62	58	87	39	8.1	39	237	53.07	26.71	2,703	2,491	1,021	1,021	12	17
Clatsop.....	9	28	78	102	38	7.4	49	237	45.53	26.34	2,166	2,056	1,021	1,021	26	23
Clay.....	16	6	127	130	35	8.8	28	269	54.60	23.00	4,438	4,418	1,864	1,864	19	24
Clayton.....	18	83	142	169	63	8.8	33	294	71.88	44.08	7,236	7,555	2,453	2,453	40	33
Columbia.....	17	87	121	157	140	8.8	33	235	51.73	24.86	2,800	2,746	1,176	1,176	26	23
Crawford.....	20	8	167	176	51	8.7	29	399	51.73	24.86	2,800	2,746	1,176	1,176	26	23

## REPORT OF COUNTY SUPERINTENDENTS.

## ABSTRACT [A]—REPORT OF COUNTY SUPERINTENDENT FOR 1906—CONTINUED.

## SCHOOL STATISTICS.

Counties.	District.		Schools.		Teachers.				Pupils.				Persons 7 to 14 not attending school.			
	School townships.	Independent districts.	No. sub-districts.	Rooms in rural schools.	No. of school rooms in cities and towns.	Average duration in months.	Number employed.		Average monthly compensation.	Between the ages of 5 and 21 years.		Ages of 7 to 14 years inclusive.				
							Males.	Females.		Males.	Females.	Male.		Female.		
Dallas .....	15	84	114	140	82	8.4	42	924	55.92	34.84	3,649	3,615	2,019	2,071	41	25
De Witt .....	6	69	84	106	26	6.7	49	137	35.88	32.99	2,391	2,808	1,284	1,527	24	16
Decatur .....	5	54	68	110	49	7.4	40	265	40.08	34.40	2,426	2,610	1,681	1,565	16	27
Delaware .....	14	25	114	139	43	8.4	16	242	48.55	31.94	2,556	2,636	1,834	1,623	71	57
Des Moines .....	15	61	25	139	155	8.0	32	232	63.36	44.74	5,598	6,706	2,707	2,832	24	17
Dickinson .....	1	8	64	73	134	8.1	16	144	53.66	55.84	1,488	1,896	2,767	2,800	26	78
Dubuque .....	10	52	69	127	132	8.7	82	278	79.92	57.92	10,129	10,415	4,486	4,462	22	18
Emmet .....	10	2	71	78	85	8.1	18	181	46.54	38.26	1,678	1,561	1,127	965	27	21
Fayette .....	13	84	104	174	76	7.9	50	893	89.88	81.62	4,771	4,809	2,447	2,408	118	90
Floyd .....	11	16	108	118	55	8.1	23	241	59.02	58.35	2,550	2,619	1,325	1,517	14	16
Franklin .....	12	97	101	136	28	7.8	42	255	89.82	83.55	2,481	2,310	1,253	1,337	41	40
Fremont .....	11	19	104	118	53	8.8	43	289	47.29	86.50	2,616	2,726	1,532	1,466	15	8
Greene .....	14	16	129	137	89	8.0	44	288	43.13	81.50	2,704	2,634	1,491	1,527	8	8
Grundy .....	9	51	75	119	52	8.1	38	180	41.04	89.55	2,336	2,228	1,281	1,234	23	18
Guthrie .....	15	15	134	140	54	8.3	48	292	43.92	34.25	8,012	2,929	1,680	1,607	34	19
Hamilton .....	14	28	107	131	51	8.8	68	294	44.29	87.41	8,396	9,573	1,772	1,917	18	18
Mancock .....	16	8	114	125	59	8.0	43	210	41.76	86.53	2,452	2,331	1,334	1,578	19	19
Hardin .....	8	65	76	138	79	8.0	41	292	50.18	84.67	8,743	5,698	2,109	3,018	46	27
Harrison .....	16	84	117	148	70	8.6	41	331	53.16	37.16	3,777	3,998	2,155	2,287	116	115
Henry .....	4	73	33	97	44	7.6	30	227	46.86	82.44	2,945	2,945	1,484	1,846	47	39
Howard .....	11	11	91	98	29	8.2	18	312	49.55	82.85	2,845	2,845	1,286	1,64	18	10
Humboldt .....	10	0	85	100	42	8.8	19	193	54.61	83.60	2,134	2,068	1,186	1,186	23	8

Ida.....	11	10	66	51	99	76	99	137	81	8	28	185	43.65	87.41	2,078	1,879	1,036	1,031	9	4
Loga.....	14	14	106	45	106	106	106	137	81	8	28	239	44.66	83.88	2,038	2,930	1,036	1,031	17	14
Jackson ..	17	17	137	50	137	137	137	137	81	8	28	241	57.01	81.84	2,769	8,878	2,037	2,178	40	84
Jasper.....	17	17	137	50	137	137	137	137	81	8	28	241	57.01	81.84	2,769	8,878	2,037	2,178	40	84
Jefferson..	17	17	137	50	137	137	137	137	81	8	28	241	57.01	81.84	2,769	8,878	2,037	2,178	40	84
Johnson....	17	17	137	50	137	137	137	137	81	8	28	241	57.01	81.84	2,769	8,878	2,037	2,178	40	84
Jones.....	17	17	137	50	137	137	137	137	81	8	28	241	57.01	81.84	2,769	8,878	2,037	2,178	40	84
Keokuk.....	2	2	115	84	124	124	124	124	80	7	54	219	43.48	84.10	2,878	8,431	1,831	1,831	23	82
Kosuth.....	28	28	212	10	212	212	212	212	56	7	7	599	42.86	36.81	4,012	8,782	2,815	2,839	75	84
Lee.....	7	7	65	46	101	101	101	101	104	7	27	257	55.02	99.54	9,830	5,677	2,981	2,917	61	54
Lian.....	11	11	74	105	167	167	167	167	34	8	55	257	55.02	99.54	9,830	5,677	2,981	2,917	61	54
Louis.....	2	2	60	82	90	90	90	90	33	8	28	166	47.21	35.04	2,135	1,085	1,177	1,080	28	23
Lucas.....	2	2	60	82	90	90	90	90	33	8	28	166	47.21	35.04	2,135	1,085	1,177	1,080	28	23
Lyons.....	12	12	18	84	137	137	137	137	41	8	55	203	46.02	37.34	2,561	2,465	1,508	1,849	35	83
Madison....	18	18	26	114	184	184	184	184	41	7	36	801	41.13	82.98	2,720	2,627	1,516	1,511	27	1
Manaska....	18	18	26	114	184	184	184	184	41	7	36	801	41.13	82.98	2,720	2,627	1,516	1,511	27	1
Marion.....	4	4	113	22	112	112	112	112	68	7	46	225	43.85	33.79	4,053	3,868	2,147	2,115	91	78
Marshall....	12	12	58	86	125	125	125	125	113	8	41	810	51.08	43.07	4,246	4,063	2,150	2,046	19	23
Mills.....	4	4	63	19	8	8	8	8	61	8	26	155	51.87	83.94	2,503	2,379	1,898	1,831	18	16
Mitchell....	8	8	47	51	89	89	89	89	8	8	17	173	61.89	83.54	2,345	2,437	1,224	1,224	6	15
Monroe.....	16	16	19	119	140	140	140	140	87	8	26	289	50.14	33.94	3,874	3,178	1,805	1,812	55	88
Monroe.....	7	7	40	60	95	95	95	95	55	7	23	191	48.88	85.41	4,023	3,712	1,419	1,374	44	28
Montgomery	10	10	37	85	103	103	103	103	55	7	32	233	50.31	86.21	2,681	2,540	1,417	1,356	24	17
Muscadine..	11	11	23	64	87	87	87	87	99	8	26	248	67.24	42.48	4,630	4,846	2,878	2,850	5	5
O'Brien....	16	16	6	123	133	133	133	133	55	8	38	250	50.21	87.55	8,090	2,982	1,692	1,733	14	7
Osceola....	11	11	8	92	90	90	90	90	25	8	20	152	46.23	84.27	1,747	1,546	1,051	924	35	25
Pago.....	11	11	47	85	119	119	119	119	79	8	25	265	51.96	88.22	3,042	2,485	2,044	2,069	12	13
Palo Alto..	16	16	7	134	112	112	112	112	40	8	25	205	44.84	84.87	2,412	2,847	1,868	1,877	16	9
Plymouth..	23	23	11	159	171	171	171	171	54	8	26	230	46.31	84.54	4,073	3,939	2,810	2,812	40	80
Pocahontas..	15	15	125	135	138	138	138	138	46	7	34	231	44.25	84.40	2,458	2,623	1,807	1,804	5	6
Polk.....	18	18	87	88	133	133	133	133	80	8	26	635	70.45	54.67	15,077	15,534	6,596	6,842	322	145
Pottawattamie	25	25	37	214	223	223	223	223	195	8	46	550	61.10	42.06	8,499	4,445	4,445	4,603	87	75
Poweshiek..	14	14	24	115	130	130	130	130	60	8	33	274	53.26	85.51	8,071	8,116	1,698	1,698	12	7
Ringgold..	13	13	40	92	123	123	123	123	40	7	36	287	41.82	81.81	2,447	2,335	1,899	1,899	86	86
Sac.....	16	16	9	132	130	130	130	130	51	8	26	254	51.88	35.01	2,889	2,900	1,537	1,594	14	14
Sacott.....	13	13	28	78	103	103	103	103	194	9	1	254	51.88	35.01	2,889	2,900	1,537	1,594	14	14
Shelly.....	16	16	10	123	136	136	136	136	42	8	44	264	43.93	36.78	3,902	3,882	1,646	1,646	16	23
Slone.....	21	21	18	161	170	170	170	170	86	8	44	279	47.87	87.96	4,601	2,882	2,592	2,592	65	83
Story.....	14	14	81	118	131	131	131	131	87	7	53	272	50.16	33.71	8,865	8,890	2,167	2,167	11	10

ABSTRACT [A] REPORT OF COUNTY SUPERINTENDENTS, 1905—CONTINUED.  
SCHOOL STATISTICS.

Counties.	Districts.		Schools.		Teachers.		Pupils.									
	School townships.	Independent districts.	No. sub-districts.	Rural.	No. of school rooms. In cities and towns.	Average duration in months.	Number employed.		Average monthly compensation.		Between the ages of 5 and 21 years.		Ages of 7 to 14 years inclusive.		Persons 7 to 14 years not attending school.	
							Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
Tama.....	12	82	95	75	65	8	53	322	46.19	86.92	3,768	3,894	1,978	1,970	24	15
Taylor.....	12	87	89	119	58	8.8	88	256	44.02	35.68	2,721	2,606	1,422	1,419	5	37
Union.....	10	24	90	107	61	8.1	86	235	49.65	83.05	2,822	2,838	1,499	1,478	25	13
Van Buren.....	8	50	65	109	41	7.6	88	189	45.02	29.91	2,593	2,830	1,371	1,168	19	19
Wapello.....	8	51	55	99	118	7.9	22	301	65.91	89.07	5,258	5,274	2,848	2,915	110	84
Warren.....	8	88	53	132	56	7.6	48	274	43.35	33.08	3,241	3,193	1,779	1,809	6	13
Washington.....	7	85	50	128	58	7.9	41	245	50.63	31.90	3,205	3,198	1,743	1,697	10	11
Wayne.....	16	84	91	116	62	7.3	71	292	38.22	90.68	2,880	2,817	1,519	1,508	11	21
Webster.....	18	43	156	172	80	7.6	82	374	47.65	37.88	4,838	4,823	2,478	2,528	30	26
Winnebago.....	10	12	76	82	95	7.2	19	146	41.80	31.72	3,172	2,985	1,191	1,134	28	21
Winnechick.....	14	45	98	141	40	7.9	33	253	43.69	81.33	3,784	3,782	1,966	1,961	68	69
Woodbury.....	17	43	136	91	229	8.6	58	494	44.72	44.14	11,216	10,796	7,609	7,274	87	29
Worth.....	12	6	87	88	24	7.8	83	124	40.90	85.17	1,841	1,738	1,037	1,064	6	2
Wright.....	15	16	118	131	62	8.2	89	274	49.33	86.67	3,130	2,901	1,762	1,706	12	8
Totals.....	1,182	3,766	9,403	12,263	6,607	8	8,598	26,011	\$ 48.62	\$ 86.06	\$ 843,152	\$ 855,630	193,507	191,440	3,404	3,768

## ABSTRACT [A]—REPORT OF COUNTY SUPERINTENDENTS, 1905.

## SCHOOL STATISTICS.

Counties.	Pupils.						School Houses.			General.			
	Enrolled in public schools.	Previously enrolled in other districts.	Total average attendance.	Average tuition per month per pupil.	Tuition received.		Number of schoolhouses.	Value of schoolhouses.	Value of Apparatus.	Number of volumes in the libraries.	Number of trees in a thirty foot circle on the schoolhouse sites.	Rooms in which the effects of students and narcotics are taught.	
					Below 5th grade	5th grade and above							
Adair.....	4,321	102	2,677	\$ 3.25	8	50	139	\$ 117,024	4,137	4,732	2,719	276	
Adams.....	3,516	79	2,271	2.39	28	44	112	107,450	5,744	2,403	2,304	183	
Allamakee.....	4,248	51	2,912	1.92	86	26	184	123,116	7,703	5,184	1,645	187	
Appanoose.....	7,062	71	5,144	1.06	124	114	186	201,815	5,534	4,146	1,033	200	
Audubon.....	3,819	22	2,461	2.10	88	35	136	118,948	7,831	3,408	902	139	
Benton.....	5,815	281	4,184	2.18	82	63	187	202,676	10,056	12,843	2,010	236	
Black Hawk.....	3,170	93	5,564	2.41	66	30	159	465,672	11,037	11,164	2,531	249	
Boone.....	6,811	122	4,658	2.17	84	58	167	312,480	9,735	12,077	2,409	218	
Bremer.....	2,339	117	3,235	2.38	66	24	113	134,200	7,484	8,403	2,180	143	
Buchanan.....	5,003	40	3,378	2.88	43	77	150	123,968	10,046	6,714	1,763	164	
Buena Vista.....	4,294	118	3,042	2.25	31	75	140	170,100	8,937	15,659	2,491	174	
Butler.....	4,384	108	3,305	2.39	115	110	147	165,533	9,766	7,866	2,437	131	
Calhoun.....	6,354	45	3,569	2.34	73	82	149	165,170	9,905	12,883	2,111	177	
Carroll.....	4,784	71	3,137	2.31	92	66	149	184,415	11,303	8,074	2,507	153	
Cass.....	5,514	70	3,571	2.19	64	66	153	177,036	8,011	8,281	2,501	174	
Cedar.....	4,854	79	3,219	2.48	94	17	143	201,390	9,432	7,699	2,537	177	
Cedar Grove.....	5,091	26	3,312	2.08	64	62	143	341,676	12,013	7,974	2,515	206	
Cherokee.....	4,300	180	2,935	2.55	65	47	144	186,213	1,139	19,460	2,368	146	
Chickasaw.....	3,970	123	2,470	2.13	47	72	121	110,240	5,400	5,067	2,134	139	
Clarke.....	3,862	9	2,211	2.23	21	25	108	90,868	2,503	2,518	2,736	180	
Clay.....	3,634	8	2,447	2.50	34	50	137	123,575	9,094	8,063	1,239	155	
Clayton.....	6,233	71	4,182	2.05	79	79	180	203,535	8,690	9,165	2,399	218	
Clinton.....	9,171	62	6,034	2.19	65	51	185	433,480	16,031	8,331	2,532	274	
Crawford.....	5,616	75	2,658	2.32	69	59	180	280,436	14,073	7,851	2,697	213	

ABSTRACT [A]—REPORT OF COUNTY SUPERINTENDENTS FOR 1905—CONTINUED.

### SCHOOL STATISTICS.

Counties.	Pup. la.					School Houses.			General.				
	Enrolled in public schools.	Previously enrolled in other districts.	Total average attendance.	Average tuition per month per pupil.	Tuition Received.		Number of school houses.	Value of school houses.	Value of apparatus.	Number of volumes in the libraries.	Number of trees in vicinity of school.	Rooms in which the effects of system are manifest.	
					Below grade and above.	Below grade.							
Dallas .....	6,817	106	4,587	8.95	118	189	907.85	2,270.15	188	214,493	8,153	8,753	322
Davis .....	2,897	71	2,501	1.72	0	54	51.70	194.81	104	19,450	9,467	1,880	159
De Witt .....	4,151	160	2,867	1.54	112	124	224.11	1,189.39	123	180,820	2,589	2,981	160
Delaware .....	4,444	469	2,817	2.17	150	81	384.39	724.47	145	140,545	2,688	2,781	171
Des Moines .....	7,895	248	4,868	2.26	84	20	232.16	888.00	79	819,609	6,989	1,737	101
Dickinson .....	2,485	178	1,809	2.71	20	36	234.71	876.85	77	25,018	2,869	1,871	103
Dubuque .....	7,950	130	4,592	2.31	18	54	79.51	163.63	165	53,441	6,577	2,165	249
Emmet .....	2,877	60	1,798	2.61	82	14	829.26	166.50	83	95,640	8,404	1,761	108
Fayette .....	7,155	108	4,739	1.98	29	68	76.25	684.84	131	211,615	11,897	2,291	250
Floyd .....	4,168	59	2,764	2.05	56	128	443.86	2,081.74	124	221,800	8,604	1,669	166
Franklin .....	3,749	87	2,504	2.58	44	42	893.81	51,591.30	144	124,955	6,848	2,288	164
Fremont .....	4,536	26	3,277	2.47	115	88	1,278.27	1,222.81	139	164,886	7,963	2,666	170
Greene .....	4,706	102	3,088	2.42	46	81	245.62	1,899.74	145	184,686	5,637	2,286	173
Grundy .....	3,097	76	2,489	2.40	65	70	867.10	672.78	128	118,697	4,582	2,811	140
Harrison .....	5,190	118	3,549	2.14	43	88	124.50	763.90	164	178,515	6,192	1,904	168
Hamilton .....	5,054	58	3,517	2.16	56	53	804.87	430.40	146	182,450	9,231	2,028	189
Hancock .....	4,064	82	2,582	2.07	91	27	865.68	529.84	134	141,168	4,932	2,486	163
Hardin .....	6,817	72	3,894	2.43	176	99	1,072.50	1,167.84	148	197,600	9,412	2,590	190
Harrison .....	4,526	96	4,481	3.10	72	18	449.42	8,043.28	167	222,635	8,458	6,856	217
Henry .....	2,895	127	3,097	1.88	63	67	233.78	492.87	109	140,260	6,647	3,079	148
Hewitt .....	3,600	24	2,818	2.83	49	41	347.91	424.47	116	118,980	4,929	4,879	125
Humboldt .....	3,518	97	2,881	2.23	97	75	894.10	978.24	112	116,275	5,160	8,780	243

# REPORT OF COUNTY SUPERINTENDENTS.

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Ida.....	3,102	2,154	3,065	41	87	151.00	1,690.00	107	132,750	7,950	7,887	3,014	183
Iowa.....	4,064	3,383	2,118	108	126	580.34	1,519.66	143	148,048	6,809	10,658	3,458	180
Jackson.....	5,574	4,018	1,792	147	79	545.40	553.00	155	100,195	8,968	4,081	2,931	204
Jasper.....	6,874	4,567	2,328	128	59	1,484.91	780.84	192	225,805	8,883	6,884	2,881	260
Jefferson.....	2,911	3,909	2,311	80	37	1,484.91	534.43	101	113,375	8,610	3,737	1,494	209
Johnson.....	5,988	3,841	2,371	114	131	1,845.83	3,661.00	172	264,025	10,314	11,647	4,559	179
Jones.....	5,114	3,550	2,108	78	96	1,330.74	1,167.66	136	175,440	8,906	10,288	2,446	118
Keokuk.....	5,849	3,949	2,060	70	127	804.78	1,215.89	146	183,720	8,177	7,938	4,140	205
Keosau.....	3,118	3,830	1,707	197	89	448.50	876.65	226	331,615	14,326	8,155	3,279	263
Lee.....	7,501	4,990	2,407	79	43	567.70	507.15	134	402,235	6,980	6,658	2,581	201
Linn.....	13,050	8,585	3,118	128	137	1,850.18	2,134.70	208	787,651	18,177	15,531	8,532	349
Louis.....	3,804	2,373	1,813	56	58	1,886.66	1,464.75	90	181,420	4,665	6,187	1,837	111
Lucas.....	4,303	3,865	2,347	53	41	264.47	656.24	99	171,230	5,961	4,168	4,446	188
Lyon.....	4,043	2,565	2,032	108	51	1,450.26	517.35	136	183,900	4,410	6,792	3,438	167
Madison.....	4,659	3,086	2,111	47	104	131.75	1,469.84	143	141,830	4,986	4,018	2,612	173
Maheke.....	7,884	5,034	2,065	96	51	643.45	519.00	157	267,815	7,488	6,449	3,082	206
Marion.....	6,444	4,244	2,114	66	80	167.19	557.00	153	210,560	7,117	6,828	2,445	199
Marshall.....	6,526	4,847	2,088	131	78	932.21	1,161.78	153	240,960	7,108	8,481	2,907	225
Mills.....	4,140	2,780	2,111	68	58	853.90	1,037.81	180	181,260	6,906	13,349	2,224	133
Mitchell.....	3,408	2,467	2,114	82	37	514.08	538.55	107	119,730	5,956	11,772	2,519	189
Monona.....	4,717	3,153	2,407	112	109	1,204.42	1,548.00	154	180,795	6,828	3,708	3,869	190
Monroe.....	5,890	3,460	1,728	60	74	16.65	180.96	104	123,165	8,578	8,094	3,715	187
Montgomery.....	4,867	3,318	2,388	88	116	49.00	1,581.88	114	197,720	6,442	6,616	3,238	187
Muscatinge.....	6,234	4,463	2,118	45	82	335.80	1,143.30	108	240,800	5,098	4,231	2,164	186
O'Brien.....	4,837	3,551	2,388	111	101	1,128.88	1,225.56	141	194,835	16,790	17,777	3,694	183
Oceola.....	2,630	1,900	2,776	51	28	899.96	1,268.07	94	111,400	3,546	11,632	1,956	113
Page.....	6,023	4,376	1,999	138	81	382.48	956.52	140	222,721	8,045	6,838	4,990	198
Palo Alto.....	3,823	2,415	2,797	37	49	874.87	410.84	133	112,578	10,704	24,675	2,876	198
Plymouth.....	5,467	3,525	2,449	49	82	618.00	872.00	182	194,700	10,005	8,718	3,124	245
Pocahontas.....	4,861	2,867	2,468	92	55	408.21	796.17	144	153,971	8,024	13,149	4,301	175
Polk.....	21,549	14,715	2,664	86	79	556.26	1,237.18	194	635,865	39,837	9,067	4,868	468
Pottawattamie.....	52,972	30,942	2,347	167	153	870.10	2,256.85	256	446,153	6,216	13,188	6,918	423
Poweshiek.....	5,067	3,726	2,307	67	109	595.00	1,588.00	145	236,155	6,099	6,099	3,585	184
Ringgold.....	4,154	2,711	3,225	70	58	499.49	517.42	135	107,840	7,048	4,418	1,717	168
Sac.....	4,608	3,489	2,022	80	93	681.70	1,172.59	144	180,725	7,282	10,897	2,849	181
Scott.....	10,908	8,089	2,622	107	86	1,070.07	624.12	121	72,030	12,618	12,049	2,849	189
Shelby.....	4,840	3,305	2,223	88	82	538.86	914.75	134	137,436	6,781	10,536	2,750	184
Sioux.....	6,186	4,110	2,411	53	77	400.10	871.15	167	201,286	6,936	11,246	3,578	217
Story.....	6,486	4,607	2,171	91	122	746.08	1,431.86	161	227,539	4,563	6,063	3,075	219

## ABSTRACT [A] REPORT OF COUNTY SUPERINTENDENTS, 1905—CONTINUED.

## SCHOOL STATISTICS.

Counties.	Pupils.						School Houses.			General.		
	Enrolled in public schools.	Previously enrolled in other districts.	Total average attendance.	Average tuition per month per pupil.	Non-resident attendance.		Number of schoolhouses.	Value of schoolhouses.	Value of apparatus.	Number of volumes in the libraries.	Number of trees in a thirty condition or the schoolhouse sites.	Rooms in which the efforts of students and natives are taught.
					Below 9th grade.	9th grade and above.						
Tama.....	5,702	88	4,189	2.39	100	61	188	254,110	9,904	9,081	4,006	223
Taylor.....	4,087	183	3,239	2.08	106	77	199	154,840	4,804	3,666	2,428	178
Union.....	4,523	88	3,340	2.52	88	86	182	319,400	4,368	5,717	1,880	188
Van Buren.....	4,685	86	3,918	1.78	180	120	116	137,115	3,896	3,860	2,168	187
Wapello.....	8,478	238	6,160	1.98	128	47	118	433,300	8,984	9,007	3,463	316
Warren.....	8,099	272	3,734	1.84	125	68	146	194,870	6,046	6,037	2,810	186
Washington.....	5,031	288	4,470	2.24	116	94	189	173,305	6,442	12,130	2,218	171
Wayne.....	5,047	74	4,446	1.81	98	146	130	181,967	7,330	5,702	1,664	170
Webster.....	7,037	152	4,700	2.97	65	58	140	381,037	8,588	14,050	2,848	245
Winnebago.....	3,464	94	3,165	2.37	23	29	94	103,654	4,589	4,660	1,510	117
Winnechick.....	5,090	48	3,035	2.03	56	19	150	163,880	6,448	8,632	2,080	173
Woodbury.....	15,911	186	9,111	2.28	116	87	216	974,810	21,322	9,917	5,089	405
Worth.....	2,732	10	1,916	2.08	18	31	97	73,565	3,382	4,853	1,976	113
Wright.....	4,473	84	3,550	2.20	38	36	141	157,960	8,469	12,036	2,268	103
Totals.....	850,376	10,039	875,563	2.23	7,844	7,083	13,998	\$23,456,618	\$27,968	794,769	290,869	18,318

## ABSTRACT [B]—REPORTS FOR 1905.

## SCHOOL FINANCES.

COUNTIES.	TEACHERS' FUND.						CREDIT.			
	On hand at last report.	DEBIT			Total debit or credit.	Paid teachers for last port.	Paid for library books.	Paid for other purposes.	On hand.	
		Received from district tax.	Received from apportionment.	Received from tuition.						
Adair.....	\$ 19,897.73	48,985.74	5,865.75	1,335.71	105.47	105.47	70,748.43	50,217.41	77.02	\$ 20,178.64
Adams.....	20,109.30	40,982.82	5,806.74	678.09	371.78	371.78	67,817.97	44,077.49	88.69	24,988.16
Allamore.....	17,994.08	84,419.81	5,801.31	1,029.08	165.58	165.58	89,908.71	40,283.10	136.48	19,141.18
Appanoose.....	22,001.98	51,814.08	5,814.08	1,318.53	290.48	290.48	99,340.85	58,678.19	819.84	26,700.78
Arundson.....	18,464.29	87,420.00	5,548.73	151.83	20.78	20.78	61,395.18	43,588.80	178.37	19,008.50
Benton.....	24,568.71	64,495.81	12,885.00	1,363.41	244.87	244.87	124,443.07	76,588.03	318.86	56,197.70
Black Hawk.....	57,393.56	79,338.87	14,734.06	893.45	96.80	96.80	161,875.15	107,344.18	98.83	54,881.98
Boone.....	28,093.45	68,688.71	9,757.53	323.20	889.97	889.97	177,648.92	74,687.81	69.68	42,098.80
Bremer.....	21,804.95	20,897.81	5,438.26	945.45	247.33	247.33	83,897.92	85,761.98	16.01	19,107.88
Buchanan.....	24,968.93	55,497.87	8,081.79	1,068.27	440.87	440.87	100,083.08	61,688.32	207.11	26,965.86
Buena Vista.....	20,844.93	49,471.01	6,062.92	1,894.24	2,837.00	2,837.00	94,876.71	86,892.90	223.88	21,884.05
Butler.....	20,028.15	53,469.00	8,378.15	1,718.05	1,255.51	1,255.51	103,811.90	60,172.71	314.58	40,868.80
Calhoun.....	19,870.07	51,219.83	7,919.88	1,645.95	1,196.20	1,196.20	88,783.63	65,886.63	175.19	17,284.46
Carroll.....	27,933.81	87,239.49	6,940.00	1,476.47	1,232.78	1,232.78	163,611.15	103,588.70	182.61	29,257.16
Cass.....	32,461.68	64,771.07	9,144.80	1,891.89	407.54	407.54	108,078.83	73,101.77	16.13	36,283.40
Cedar.....	40,731.28	51,935.07	11,997.70	1,966.83	166.87	166.87	106,797.69	63,094.78	163.88	42,493.25
Cerro Gordo.....	47,780.85	55,259.43	10,277.45	1,584.06	1,684.06	1,684.06	114,013.86	64,861.88	287.90	48,084.01
Cherokee.....	40,688.77	66,171.04	6,843.60	1,831.68	181.24	181.24	124,584.21	61,744.73	253.00	42,984.97
Chickasaw.....	21,633.10	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Clarke.....	22,878.12	20,211.88	4,116.11	137.11	12.96	12.96	45,394.37	35,517.92	156.83	22,718.96
Clay.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Clayton.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Clinton.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Crawford.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Dallas.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Davis.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
DeKalb.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Delaware.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Des Moines.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Dickinson.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12
Dubuque.....	22,861.40	26,839.28	4,218.00	984.21	124.86	124.86	48,384.20	38,511.73	153.00	22,671.12

## ABSTRACT [B]—REPORTS FOR 1905—CONTINUED.

## SCHOOL FINANCES.

COUNTIES.	TEACHERS' FUND.									
	DEBIT.					Total debit or credit.	CREDIT.			
	On report at last	Received from district tax.	Received from annual apportionment.	Received from tuition.	Received from other sources.		Paid teachers' salaries last port.	Paid for other purposes.	Paid for library books.	On hand.
Emmet.....	\$ 16,895.80	\$ 36,478.59	\$ 4,710.92	\$ 493.75	.....	\$ 58,076.26	\$ 87,708.49	\$ 149.01	\$ 843.80	\$ 19,830.43
Fayette.....	45,295.95	63,817.28	13,612.45	891.58	569.70	124,676.96	73,871.75	109.02	232.60	51,073.50
Floyd.....	18,639.27	49,619.28	7,232.84	1,632.49	792.50	78,225.40	55,045.08	51.81	835.28	31,253.08
Franklin.....	25,217.56	42,844.31	6,914.01	845.76	979.51	70,899.19	50,909.16	216.89	934.57	34,940.58
Freemont.....	84,085.10	59,878.09	7,466.53	2,247.78	179.31	108,896.84	90,547.23	274.82	134.17	40,935.33
Greene.....	35,001.83	49,553.46	13,101.54	956.12	859.95	99,490.70	59,760.82	153.81	319.60	39,250.99
Grundy.....	27,863.75	43,190.04	7,559.10	938.53	189.58	73,808.81	48,181.88	97.43	223.64	30,255.86
Guthrie.....	81,001.56	56,117.72	8,428.46	968.40	1,432.46	99,089.82	73,898.07	25.14	879.14	35,800.47
Hamilton.....	27,091.05	57,611.35	7,964.45	631.03	204.04	93,872.45	58,194.59	847.61	5-7 06	38,616.91
Hancock.....	24,173.00	51,397.00	6,326.84	695.56	293.77	88,876.17	75,711.50	281.86	1,087.52	51,812.21
Hardin.....	50,546.66	69,969.07	9,000.25	2,327.54	470.54	131,863.99	81,351.23	119.78	7,665.97	40,986.56
Harrison.....	43,650.29	67,883.37	9,710.40	1,632.02	293.46	123,268.52	87,604.89	109.00	1,804.77	31,063.49
Henry.....	23,489.36	37,009.46	6,761.03	684.09	2,614.76	70,616.32	47,689.89	109.00	2,894.77	16,879.72
Howard.....	14,156.41	31,300.87	7,819.15	812.88	78.06	57,689.89	38,815.90	182.98	649.31	26,560.77
Humboldt.....	37,914.32	36,234.68	5,519.30	871.29	578.40	71,198.17	45,630.23	10.51	665.95	35,733.93
Ide.....	83,651.81	45,841.63	8,438.70	2,072.62	563.25	85,601.10	49,191.69	10.51	665.95	35,733.93
Iowa.....	28,947.13	45,715.51	8,057.75	1,053.51	6,044.38	89,848.34	57,938.78	236.57	4,064.23	27,668.45
Jackson.....	36,431.94	48,199.88	7,631.61	1,854.81	892.27	93,900.09	59,680.67	231.15	231.15	34,080.87
Jasper.....	41,187.06	61,007.91	9,170.91	2,225.79	693.55	113,348.23	90,780.19	148.37	869.90	37,067.71
Jefferson.....	19,241.38	33,400.76	6,672.41	770.99	112.25	60,183.74	37,984.04	135.19	70.07	21,969.45
Johnson.....	29,831.81	33,568.66	9,753.30	2,448.54	884.60	99,671.41	78,810.28	59.00	512.87	25,869.73
Jones.....	86,161.08	55,813.71	9,636.70	1,066.30	495.03	100,191.67	58,561.99	114.43	718.80	40,807.15
Kearney.....	36,804.66	52,746.14	8,815.80	2,278.01	222.68	100,446.69	63,043.34	200.02	912.24	36,283.95
Kearns.....	46,812.93	72,744.81	10,113.67	1,003.61	1,713.67	133,407.17	90,289.85	306.31	1,735.02	50,136.48
Lee.....	15,092.80	69,612.88	11,261.53	1,296.77	78.84	97,297.79	78,873.07	159.62	2,094.74	10,311.86
Linn.....	92,171.64	145,857.96	20,963.92	3,101.66	855.67	262,670.78	166,900.73	220.48	1,145.06	94,854.90
Louis.....	22,873.82	31,069.63	4,719.44	1,829.49	191.00	68,169.79	40,143.28	105.63	244.81	21,857.83
Lucas.....	20,433.53	35,297.10	5,410.90	843.90	194.05	63,428.50	40,013.15	179.53	639.59	21,690.26
Lyon.....	30,572.41	52,648.01	6,611.38	1,068.26	.....	92,027.11	57,040.90	156.80	740.39	34,080.05

Madison.....	20,980.60	43,232.89	6,963.21	1,561.59	1,873.12	1,692.61	75,960.71	50,604.91	142.19	23.21	21,892.89
Manitoba.....	24,140.98	81,100.99	9,171.40	1,373.12	1,873.12	1,692.61	119,693.09	51,264.04	297.73	3,266.71	24,649.98
Marquette.....	96,601.79	53,948.51	8,461.38	2,993.51	3,693.99	3,774.49	185,840.89	97,917.95	296.63	4,094.73	40,131.53
Marshall.....	31,431.38	90,734.74	3,613.43	2,042.99	2,042.99	2,042.99	180,485.85	95,981.98	160.97	4,094.73	80,812.43
May.....	28,049.45	46,147.28	8,182.10	1,447.61	1,447.61	1,447.61	81,841.80	49,984.03	116.87	1,732.49	31,093.54
Mitchell.....	25,553.56	53,735.03	6,843.93	1,889.13	1,889.13	1,889.13	84,417.80	45,684.76	142.89	1,732.49	31,093.54
Monroe.....	27,298.01	57,101.49	6,043.62	1,326.42	1,326.42	1,326.42	102,619.77	53,613.47	72.42	688.96	28,942.86
Monroe.....	18,609.51	43,053.94	5,595.08	1,288.68	1,288.68	1,288.68	67,832.04	35,434.48	891.70	891.70	28,942.86
Montgomery.....	27,872.72	49,491.48	8,373.49	1,451.80	1,451.80	1,451.80	87,506.89	37,506.89	50.69	4,732.97	28,474.31
Muskegon.....	14,532.60	75,997.52	10,100.80	1,584.96	1,584.96	1,584.96	102,897.32	57,506.89	94.70	4,732.97	16,607.36
O'Brien.....	88,437.47	64,180.47	6,144.62	2,334.44	2,334.44	2,334.44	104,874.91	70,309.24	.....	1,798.95	84,884.73
O'Connell.....	23,168.56	39,396.34	8,743.75	686.55	686.55	686.55	50,045.04	31.01	.....	299.95	26,638.30
Pape.....	44,719.51	64,891.80	10,183.96	1,890.00	1,890.00	1,890.00	130,875.39	69,908.59	264.59	292.25	50,192.03
Park Ath.....	21,791.21	46,833.19	5,681.50	991.87	991.87	991.87	60,841.80	30,841.80	200.43	1,462.25	23,192.41
Plymouth.....	21,689.37	46,833.19	5,681.50	991.87	991.87	991.87	60,841.80	30,841.80	200.43	1,462.25	23,192.41
Pontiac.....	13,031.48	25,720.83	3,737.15	1,159.53	1,159.53	1,159.53	37,937.15	19,937.62	19.77	1,159.53	13,031.48
Pottawamie.....	50,979.74	170,033.12	20,733.12	2,097.50	2,097.50	2,097.50	204,133.88	133,173.99	274.21	1,732.94	70,954.34
Poweshiek.....	54,477.91	81,168.20	9,186.54	2,703.84	2,703.84	2,703.84	105,671.88	69,839.76	132.57	183.08	58,885.92
Ringgold.....	83,967.72	43,504.96	5,891.15	1,094.11	1,094.11	1,094.11	78,986.29	46,880.17	71.71	1,137.71	25,945.68
Seco.....	27,059.15	53,281.65	10,144.21	1,975.84	1,975.84	1,975.84	94,208.95	59,984.19	10.50	947.00	28,253.67
Scott.....	87,640.83	141,695.72	21,658.16	1,765.14	1,765.14	1,765.14	257,173.23	171,213.13	160.74	773.41	85,016.95
Shelby.....	31,023.51	51,940.74	8,140.80	1,543.79	1,543.79	1,543.79	65,864.40	32,413.17	298.84	277.17	32,880.73
Storx.....	37,989.06	79,918.95	13,927.29	1,040.45	1,040.45	1,040.45	99,877.87	56,835.79	156.02	545.58	43,574.45
Story.....	43,117.50	67,397.77	10,195.47	2,214.85	2,214.85	2,214.85	123,868.19	77,894.95	140.06	600.33	43,771.84
Tama.....	53,313.80	62,299.80	14,571.20	1,538.18	1,538.18	1,538.18	131,389.01	70,255.10	205.14	397.00	51,551.77
Taylor.....	23,618.16	46,944.61	9,886.64	1,563.72	1,563.72	1,563.72	52,373.29	30,889.85	80.90	159.40	24,753.14
Union.....	25,020.80	46,218.43	6,237.40	1,535.14	1,535.14	1,535.14	79,047.22	58,237.57	283.26	159.44	20,323.95
Van Buren.....	25,166.99	31,702.96	5,967.72	1,812.40	1,812.40	1,812.40	65,785.88	38,454.08	115.59	904.16	26,261.18
Wapello.....	23,137.46	37,434.41	10,026.19	1,064.15	1,064.15	1,064.15	126,438.49	95,707.05	293.08	249.00	29,215.30
Warren.....	22,797.65	45,960.53	5,014.06	1,111.56	1,111.56	1,111.56	76,236.24	40,161.87	443.12	443.12	22,449.18
Washington.....	23,902.35	55,868.65	11,576.95	2,570.85	2,570.85	2,570.85	93,599.18	61,497.69	108.18	2,874.89	38,064.86
Wayne.....	24,904.45	41,442.65	6,176.15	1,631.87	1,631.87	1,631.87	78,563.88	45,535.76	243.50	405.13	26,792.45
Webster.....	33,111.76	84,702.91	11,918.06	1,117.82	1,117.82	1,117.82	130,351.97	87,469.39	769.18	769.18	41,768.01
Winnebago.....	21,980.81	31,659.76	6,450.71	447.18	447.18	447.18	60,801.04	35,968.54	120.04	439.00	24,219.98
Winnebush.....	25,653.58	41,222.96	9,099.98	1,300.99	1,300.99	1,300.99	77,608.81	46,909.65	266.78	1,406.47	26,023.41
Woodbury.....	72,907.56	134,945.83	21,760.24	1,909.57	1,909.57	1,909.57	232,432.87	135,931.16	76.60	2,837.60	95,997.51
Worth.....	16,919.29	28,015.83	3,411.49	261.90	261.90	261.90	45,082.56	28,715.00	815.71	463.11	14,198.78
Wright.....	56,454.63	63,978.12	5,027.16	1,648.66	1,648.66	1,648.66	110,437.52	66,966.92	86.18	.....	46,327.81
Totals.....	43,221,405.69	95,969,617.75	12,897,490.41	1,128,761.75	1,128,761.75	1,128,761.75	110,307,063.77	61,243,174.41	913,971,888,853.29	48,487,898.97	48,487,898.97

## ABSTRACT [B]

## SCHOOL

Counties.	Schoolhouse Fund.									
	Debit.			Total debit or credit	Credit.					
	On hand at last report.	Received from district tax.	Received from other sources.		Paid for school-houses and sites.	Paid on bonds and interest	Paid for library books.	Transferred to other funds.	Paid for other purposes.	On hand.
Adair.....	\$ 594.47	\$ 4475.59	\$ 42.00	\$ 5482.06	\$ 1095.92	\$ 1744.21	\$ 28.90		\$ 990.45	\$ 1552.81
Adams.....	2446.74	3294.91	106.4	3848.05	779.82	1725.44		\$ 516.64	635.79	7302.44
Allamakee.....	630.8	135.43	2513.00	4579.23	250.08	157.25		182.55	72.60	1700.23
Appanoose.....	4634.1	5944.50	11121.9	21701.57	5734.72	4474.51		170.00	7682.73	2634.50
Audubon.....	1807.8	5485.42	108.05	7391.27	2560.5	1599.00		957.91	48.63	120.65
Benton.....	9395.00	800.00	14116.11	24052.6	13067.43	6391.5		249.1	1035.57	3364.06
Black Hawk.....	3223.84	28278.76	2727.3	37779.47	27839.42	11739.51		50.00	1337.40	17271.84
Boone.....	9491.00	10594.4	4084.71	17170.80	4156.84	4428.71	149.10	614.61	422.77	7400.29
Bremner.....	144.87	6082.78		7584.40	1841.50	3021.17		104.2	903.59	2653.96
Buchanan.....	3392.70	4532.9	1351.00	9277.60	628.11	4287.25	8.76	90.3	3222.31	1615.88
Buena Vista.....	7553.49	6808.60	149.27	14514.80	944.71	7317.04		1008.11	447.20	4802.31
Butler.....	1574.86	9091.67	4576.70	15343.2	4899.89	5101.80		25.00	1189.51	4329.95
Calhoun.....	2921.59	8523.99	8423.44	19969.00	13893.6	295.99		150.00	1257.80	2641.47
Carroll.....	8023.85	10156.98	1335.2	14574.6	7285.55	3306.74		262.91	183.50	8025.81
Cass.....	8070.67	4651.98	7132.40	14553.9	698.91	1386.65	11.99	643.1	5494.41	5759.88
Cedar.....	287.8	4936.10	25555.70	32489.71	25395.2	2116.15		208.2	219.89	4555.18
Cerro Gordo.....	827.74	15328.80	1537.87	25397.47	8770.74	7093.1		1212.8	1157.60	7157.61
Cherokee.....	3236.07	4119.94	134.58	7539.5	1910.00	1233.40		209.2	108.00	4194.96
Chickasaw.....	1814.55	2565.50	1532.2	5912.25	24.98	1161.81		548.6	880.15	1187.79
Clarke.....	915.42	4732.27	977.85	6655.50	516.00	034.57		48.1	149.47	3850.35
Clay.....	2153.41	8161.00	844.2	10658.76	1279.28	5693.4	18.00	171.60	331.39	3650.06
Clayton.....	2071.1	5502.79	182.64	9466.45	1285.52	5174.4		918.58	1245.52	2574.85
Clinton.....	6718.08	18190.11	83.28	47907.01	994.61	8594.51		311.0	684.75	36027.91
Crawford.....	1772.00	7556.0	1175.35	10503.35	1291.00	6229.00	100.00		13.34	1549.18
Dallas.....	5115.70	10120.90	21545.80	36783.1	23674.1	1721.90		463.86	432.90	11484.61
Davis.....	1144.52	4659.85	43.67	5847.5	607.36	3542.07		34.6	27.91	3256.52
Decatur.....	1382.92	7486.71	1892.78	10262.4	3401.45	1541.2		112.10	2668.6	2543.99
Delaware.....	1198.89	2034.11	11099.35	14546.4	4587.8	893.45		163.27	240.3	5909.59
Des Moines.....	1829.63	14351.39	1075.3	17756.30	2945.14	9408.54		153.97	571.29	335.27
Dickinson.....	2908.07	7911.80	610.18	11184.40	8474.07	8897.82		1209.61	273.75	2299.72
Dubuque.....	1784.76	5312.1	96.50	7693.5	576.41	4836.54		512.61	892.90	1074.74
Emmet.....	3172.94	3718.41	1823.5	8709.8	4400.11	2650.5			3.40	1696.79
Fayette.....	4700.60	10018.08	1648.5	16367.2	9621.80	3313.4	1.00	613.44	85.25	2881.78
Floyd.....	5008.54	8936.71	13.80	13906.05	1425.60	7093.81		1510.00	348.97	3630.71
Franklin.....	2235.13	919.10	83.44	1194.67	2350.00	2102.4		226.1	824.8	5629.74
Fremont.....	1475.64	6488.5	24.15	8088.8	3896.20	1480.00		178.8	343.70	2719.63
Greene.....	1691.80	3113.73	2025.94	5831.47	6812.3	1292.77		117.41	1337.03	17781.98
Grundy.....	2510.22	5019.85	8973.99	11504.07	034.94	4263.3		641.84	2980.42	8643.52
Guthrie.....	8197.09	5816.8	180.90	6994.87	1561.34	1768.62		1823.91		1753.47
Hamilton.....	3084.90	11366.7	11240.51	25781.21	11122.2	3874.00		98.70	480.56	10154.86
Hancock.....	7347.87	6947.80	1871.71	16167.4	4466.6	1899.8		1643.86	895.15	7772.49
Hardin.....	6141.81	811.20	282.30	15294.9	3045.98	5572.52		418.74	2154.86	4047.57
Harrison.....	6941.6	8994.80	9495.58	25432.14	6979.43	13489.47		877.4	1922.81	2653.96
Henry.....	1659.27	3002.30	263.9	4925.4	1120.61	2066.29		589.00	21.54	1128.08
Howard.....	8765.65	4150.14	25125.00	83340.79	15690.00	5036.60			141.69	12023.44
Humboldt.....	12981.65	8641.84	412.00	17084.90	12368.44	1620.11		53.80	204.09	2433.55
Ida.....	8565.51	5225.01	4791.00	16521.6		7594.60		97.45	8792.13	2217.84
Iowa.....	4135.78	5490.00	477.9	10108.72	2166.4	2134.09		74.28	493.18	5236.77
Jackson.....	2426.88	4073.01	4108.77	10607.07	3211.41	1630.23	1.00	718.5	2385.17	3665.17
Jasper.....	3580.20	11110.40	2323.79	17016.44	5770.75	4905.80		227.71	1510.55	4711.68

## RE PORTS FROM 1905—CONTINUED.

## FINANCES.

Contingent Fund.												
Debit.			Total debit or credit	Credit.								
On hand at last report.	Received from district tax.	Received from other sources.		Paid for fuel, rent, repairs, insurance and janitors.	Paid secretaries and treasurers.	Paid for records and apparatus.	Paid for library books and dictionaries.	Paid for free text books.	Paid for text books and gen'l supplies.	Paid for other purposes.	On hand.	
\$ 7137.75	\$ 16631.02	\$ 470.04	\$ 21380.79	\$ 12339.71	\$ 1424.59	\$ 332.79	\$ 181.48	\$ 388.30	\$ 578.18	\$ 1945.32	\$ 7607.64	
5162.91	18257.80	806.85	18227.64	8250.42	1131.88	165.35	68.54	897.58	1132.94	6932.73	1132.94	
4314.82	13474.77	1537.91	13936.80	9346.95	1146.68	72.10	69.70	110.60	1153.08	937.09	5120.65	
11674.45	14336.08	205.84	26705.87	13917.41	1813.05	323.95	183.90	71.04	430.02	1383.97	9177.63	
4679.61	147.78	2831.68	23395.29	11659.21	1219.07	470.13	16.79	532.86	263.58	2201.41	5942.25	
14727.02	23306.07	2184.80	39947.48	18773.63	1798.01	93.00	71.61	1141.81	2534.51	15403.86		
13624.85	27531.95	8650.88	53996.88	24163.10	1616.88	166.89	639.86	9.70	4089.48	9634.67	11780.80	
7216.26	23537.25	7171.80	38315.81	14987.14	1794.24	61.90	204.11	1.85	455.30	11043.69	8381.74	
5442.94	13749.88	1766.65	26719.65	9514.14	1292.83	113.52	128.78	53.27	1783.89	2181.99	5814.70	
7949.81	19371.85	1196.38	28513.94	14305.88	1483.26	271.69	133.85	49.95	877.30	2637.77	8781.55	
9895.62	2102.58	4161.71	35135.91	12133.08	1261.93	398.95	115.52	20.70	1445.59	11349.27	8431.53	
12293.29	18348.83	44.58	31843.70	18489.53	1691.61	874.68	109.84	60	603.90	2175.28	13388.76	
5118.09	21748.41	2342.62	23477.72	17344.57	1670.50	617.54	81.43	488.30	2566.72	1799.94	4888.58	
9467.61	21743.40	2704.63	33430.84	13307.78	1539.95	715.74	878.5	256.30	2038.49	2980.55	11714.88	
8231.47	24807.01	2819.24	35547.71	17105.96	1418.67	182.90	710.82	9.70	604.08	4494.12	9381.98	
11935.37	17618.96	2768.48	28837.76	18990.8	1751.94	404.13	117.33	98.59	635.85	4110.84	11221.77	
6539.06	27742.97	11191.59	45145.82	23103.47	1519.04	1303.68	151.80	41.69	6556.94	6075.75	894.01	
11141.41	19211.96	9689.61	38307.96	15948.07	1707.57	835.61	38.00	651.14	864.49	1540.06	11381.19	
8120.97	12470.68	5353.23	21845.36	962.50	1077.75	133.22	98.81	651.14	421.14	5531.93	1391.17	
8998.75	11186.19	479.45	16063.82	8790.88	875.95	147.76	28.66	90.02	80.02	1280.67	4932.83	
6515.97	14287.28	2367.78	23111.96	1213.28	608.68	33.84	49.95	816.65	4186.49	8562.46		
7618.05	21428.47	2183.65	31819.17	1398.27	1746.68	390.51	485.42	78.26	2484.62	3240.11	9037.86	
13401.33	42136.69	1783.72	55924.75	2765.71	2534.49	839.12	177.49	3404.94	2897.13	6627.44	10847.87	
7839.68	25766.68	7707.85	43818.69	36440.72	2139.40	243.91	311.32	973.66	3465.74	6644.59	7996.43	
13423.78	23935.36	5621.69	39932.06	17752.85	1735.21	753.70	577.99	10.10	1045.28	7500.58	10549.30	
1630.96	8705.31	9793.77	14365.96	7134.94	1066.19	50.09	1.38	116.89	6717.25	2064.76		
4369.74	13477.44	1707.43	14851.45	9721.85	1216.96	369.75	201.98	173.10	812.54	3219.18	4151.84	
6640.94	18037.86	2191.68	25481.39	11333.74	1375.77	651.66	177.27	811.21	1785.56	5519.95		
3973.78	29793.82	6484.82	37006.82	20514.31	1532.63	437.43	155.90	337.28	1683.79	1649.91	4681.97	
2412.42	11431.67	1593.54	15574.93	7840.13	961.72	120.84	69.84	279.65	2960.78	3381.24		
6543.71	48568.98	781.07	63367.36	33975.82	4393.29	1593.99	436.39	9.85	2434.10	6788.03	4801.73	
4921.41	13628.46	295.57	18046.44	10651.78	758.27	806.48	.....	.....	1045.75	2968.87	8415.91	
10050.58	24089.96	1388.07	25508.55	10651.84	1345.05	53.22	139.68	10.41	753.20	2488.89	18396.84	
5382.14	20170.22	2706.72	27806.98	1215.77	913.00	232.96	113.95	86.14	539.36	6956.07	6999.94	
7812.42	15313.72	3939.20	26117.34	12105.61	1600.64	169.23	118.07	2.46	463.87	2910.76	8644.79	
10123.96	17836.41	1363.11	29824.48	14343.61	1436.69	386.84	198.81	899.06	853.82	2672.85	9463.41	
9721.29	17854.83	1702.18	29337.80	11818.54	1354.59	790.48	1304.29	.....	715.15	8106.04	10393.78	
6974.31	12890.92	3040.92	22883.28	10993.19	1899.43	111.36	181.30	.....	91.55	9738.32	7505.13	
8711.10	12136.36	1856.92	31699.98	13098.86	1126.68	240.80	327.67	8.54	138.48	1869.97	10580.91	
10082.34	19248.66	3180.48	33121.98	13059.71	1582.72	479.58	79.40	7.91	3180.89	2928.82	11607.95	
3032.77	21178.00	3180.40	31407.13	12420.75	1427.44	291.48	45.96	470.83	1342.17	5902.33	11436.70	
13130.70	26970.41	1979.68	39994.82	19199.78	1852.90	264.56	152.92	6.00	2702.94	2815.97	12371.40	
11155.00	25715.81	1873.47	28745.78	18521.06	1480.21	593.70	131.75	844.09	3161.53	2800.60	11923.23	
6447.84	14143.63	2993.02	29938.61	11908.92	1467.33	434.86	33.56	.....	239.43	2770.25	6638.22	
4686.88	12781.89	548.38	17779.09	11144.58	911.77	149.83	83.41	.....	161.58	515.86	49.240	
4385.77	12799.87	1541.69	19782.96	9968.80	862.62	173.05	19.85	2.06	843.64	2636.76	4963.49	
5408.97	15336.71	2279.41	29935.09	12154.14	1021.62	278.52	.....	1.14	267.14	8734.67	7184.96	
8771.28	17080.66	5593.76	31860.61	12501.85	1723.54	1065.83	24.51	8.79	1417.06	4596.98	10117.65	
12312.28	19249.99	1967.68	33450.19	1850.78	1998.61	253.90	175.17	194.37	2540.02	8134.01	11649.13	
8495.26	26068.05	3306.13	35669.55	17313.47	1599.50	968.14	38.40	273.83	2297.89	2115.46	11377.87	

## ABSTRACT [B]—

## SCHOOL

Counties.	Schoolhouse Fund.									
	Debits.			Total debit or credit	Credits.					
	On hand at last report.	Received from district tax.	Received from other sources.		Paid for school-houses and sites.	Paid on bonds and interest.	Paid for library books.	Transferred to other funds.	Paid for other purposes.	On hand.
Jefferson .....	\$ 323.08	\$ 1303.42	\$ 7343.5	\$ 8970.00	\$ 7881.73	\$ 846.54	.....	\$ 166.87	\$ 632.57	\$ 472.39
Johnson .....	2391.43	14865.03	8706.93	25763.39	3169.04	15596.83	\$ 2.15	519.37	5239.04	1812.86
Jones .....	804.38	4073.02	238.81	5136.21	1087.19	1816.64	.....	337.97	808.72	2026.90
Keokuk .....	3454.78	11404.46	2448.54	17307.78	8261.56	5988.71	.....	9.77	501.40	2846.39
Kossuth .....	9053.62	12010.49	9241.36	50319.46	10953.02	4418.79	.....	560.00	6586.39	8410.26
Lee .....	439.55	8258.18	2611.0	6338.75	2872.15	1515.0	.....	167.25	1609.74	875.54
Linn .....	11719.01	42671.9	2322.7	56714.60	24912.20	17841.21	.....	842.59	2041.43	11557.06
Louis .....	1162.41	4100.20	6002.9	11265.60	5149.51	182.17	.....	179.80	825.55	4924.58
Lucas .....	2012.10	9194.2	900.7	12111.11	2775.61	4651.7	.....	301.47	128.58	4250.50
Lyon .....	7790.12	24576.8	4074.41	86341.40	5428.24	22178.38	.....	825.85	163.56	8145.34
Madison .....	1404.49	6302.8	6999.11	14613.56	6122.69	3904.0	.....	124.23	2626.76	2538.86
Mahaska .....	1899.47	8065.1	2006.9	12732.82	1833.98	4487.88	.....	1.35	277.19	599.42
Marion .....	8265.28	7701.65	8005.41	23978.42	12323.65	5592.9	.....	529.11	1668.78	5949.45
Marshall .....	4170.43	9121.25	763.2	14063.90	3836.00	4132.7	.....	789.20	1567.06	4167.93
Mills .....	2433.65	5502.81	2186.41	10322.90	3237.39	3955.38	40.85	135.14	741.34	2712.54
Mitchell .....	1915.84	4222.07	634.5	6795.97	118.26	3360.41	.....	.....	223.43	839.23
Monona .....	7257.9	9730.4	1739.5	17719.92	9104.22	8490.40	.....	861.32	1438.72	4036.23
Monroe .....	9334.60	8973.6	1067.1	19409.44	10131.47	6503.81	.....	94.09	500.81	2074.66
Montgomery .....	2731.33	8190.92	2193.4	13123.75	1970.00	3981.00	.....	783.00	5001.44	1507.91
Muscatine .....	188.2	5232.08	.....	5410.81	150.00	2510.00	.....	169.57	2491.17	89.57
O'Brien .....	3220.58	14057.10	2721.38	19927.95	3924.78	4714.11	.....	21.70	6255.1	5382.09
Oceola .....	2557.04	6630.30	392.94	9910.28	3994.06	2275.15	.....	1032.00	612.82	1945.83
Page .....	3724.51	8334.8	17780.85	23819.78	16058.01	8505.66	.....	1395.47	456.83	8425.98
Palo Alto .....	4483.57	6588.82	284.55	11361.01	1348.55	2111.00	.....	527.84	174.31	7404.32
Plymouth .....	12853.16	9878.85	590.08	23323.10	1507.66	4552.10	.....	1100.00	96.06	2273.30
Pocahontas .....	8098.95	1022.58	1239.1	19575.94	9730.65	1881.4	6.10	1124.84	667.35	6133.61
Polk .....	8275.76	74594.2	24654.36	10444.28	38444.42	82137.75	332.50	1182.40	7601.46	26519.57
Pottawattamie .....	3469.22	30428.07	16084.27	40435.56	24150.50	10449.88	.....	729.41	1008.70	5347.07
Poweshiek .....	3979.73	17356.60	1092.90	23559.33	19959.08	5692.74	.....	1652.80	4353.32	4252.37
Ringgold .....	5163.70	5787.25	1295.0	12251.07	2122.90	2932.30	.....	208.34	892.15	6095.38
Sac .....	3535.84	1173.45	15316.8	30959.10	5394.47	2816.71	.....	1132.50	3074.08	18564.23
Scott .....	9411.41	19917.97	4214.87	11844.27	6063.65	15547.31	.....	1075.37	1009.24	40958.70
Shelby .....	1434.20	6796.75	450.23	8671.21	2591.47	3804.9	.....	84.42	263.00	1928.29
Sioux .....	7435.6	8055.98	342.11	16839.69	4442.03	4304.61	.....	802.71	1122.44	5436.04
Story .....	5113.79	9060.20	0435.7	23515.70	14239.70	3914.32	10.00	47.55	524.47	4759.62
Tama .....	1454.17	10747.65	5961.9	31488.69	14251.49	7535.84	23.85	60.78	1395.62	8195.97
Taylor .....	14676.66	7470.17	1215.74	23362.57	7925.77	2030.70	.....	.....	1041.76	11794.29
Union .....	7326.90	10234.07	3249.96	20834.92	8724.49	2978.00	.....	267.47	247.92	8647.00
Van Buren .....	5040.68	8625.35	34.80	8700.41	4308.99	667.60	.....	843.69	170.00	8310.13
Wapello .....	2549.98	14016.59	1572.10	19008.67	2019.31	8452.59	.....	3967.79	844.35	4924.69
Warren .....	1092.98	7444.31	2740.5	11251.28	5119.34	4002.78	.....	542.83	117.00	1463.75
Washington .....	1611.10	5473.53	5777.80	12857.55	5489.76	6464.62	13.87	172.71	54.10	905.55
Wayne .....	674.09	5725.78	15003.8	22003.19	1616.64	1219.67	.....	798.15	362.94	9936.79
Webster .....	3079.69	16734.11	3017.9	44935.08	30693.79	4803.51	49.87	1626.15	3050.40	8616.81
Winnebago .....	1342.18	5176.31	413.12	6931.59	540.10	4373.10	.....	70.47	498.46	1609.46
Winnesiek .....	2407.21	7183.32	3245.64	18414.07	2924.45	2491.21	.....	134.27	6922.31	2649.81
Woodbury .....	6112.00	6703.56	82081.38	99897.03	63054.82	20247.61	.....	1290.08	4155.54	3985.18
Worth .....	1843.61	3195.85	435.88	5475.17	1119.53	1246.60	10.80	520.45	496.80	20091.84
Wright .....	3694.08	3839.29	19263.98	20769.93	14060.25	8464.29	.....	1296.18	356.34	1513.05
Total .....	478110.12	200811.23	5613.62	300177.96	777241.34	47318.26	302.38	50967.51	145180.90	582787.60

## REPORTS FOR 1905—CONTINUED.

## FINANCES.

## Contingent Fund.

Debit.			Total debit or credit	Credit.									On hand.
On hand at last report.	Received from district tax.	Received from other sources.		Paid for fuel, rent, repairs insurance and janitors.	Paid secretaries and treasurers.	Paid for records and apparatus.	Paid for library books and dictionaries.	Paid for free text-books.	Paid for text books and gen'l supplies.	Paid for other purposes.			
4622.29	9559.43	1571.18	15648.90	8494.25	1079.55	851.06	57.31	.....	898.01	587.28	4688.43		
6340.08	25837.08	4971.78	30748.79	16775.74	1788.40	598.06	160.85	.....	3460.41	5843.22	8127.11		
8993.41	18464.05	4708.86	32099.81	12502.88	1895.81	438.94	90.86	.....	3419.68	8968.16	10384.10		
8955.43	21999.87	2764.74	34019.80	16401.34	1854.22	879.26	899.81	15.00	713.68	3128.27	11728.45		
11868.87	25891.16	8528.10	41281.63	20715.28	1907.95	479.47	879.22	882.66	707.61	3773.00	13927.48		
5917.73	26423.68	1319.89	38661.87	18634.71	1379.85	149.22	118.52	14.12	1699.95	7450.50	4204.61		
3075.21	68452.71	30597.14	93355.06	44818.93	8491.70	806.79	806.86	4107.84	5492.85	25177.43	9686.48		
2699.47	13117.67	2250.37	18957.51	7348.46	108.87	595.57	872.85		543.66	2308.48	5676.78		
3441.01	14694.06	1169.56	19614.63	12344.98	1100.58	108.64	58.78	251.97	442.45	1237.11	4081.81		
11136.42	20244.76	547.86	31929.04	15169.58	1948.43	428.26	233.90	73.80	1546.47	518.32	11607.01		
7105.78	13416.85	1414.04	27026.64	13581.79	1128.53	491.25	186.13		1932.96	846.14	8969.84		
9950.88	20672.79	4241.63	34793.27	15099.51	1880.98	175.23	74.83		186.46	4470.01	12608.22		
11501.60	21598.68	8093.3	36218.58	13492.82	1842.82	995.72	95.21	6.62	1536.81	6585.86	11681.93		
8994.27	33375.07	3548.78	44905.12	20873.06	1517.45	901.98	537.49	1654.55	3816.84	4422.98	11176.75		
7347.95	14917.67	2965.92	25148.49	9396.88	1674.99	341.84	408.36	503.82	889.27	3415.41	8151.63		
3904.74	147891.76	1223.10	24561.70	11964.28	691.28	98.08	68.94		525.76	8108.51	7609.99		
7730.30	33965.77	8848.78	58376.77	16173.10	1386.91	297.08	48.22		833.58	5092.08	12450.80		
379.95	1381.28	2198.21	19087.41	9418.03	1146.21	86.6	204.61	45.97	311.64	3102.89	4151.43		
7808.57	18792.61	4998.52	31894.70	16615.76	1100.85	1671.19	20.98	148.87	1890.64	8279.65	7473.28		
8145.66	26447.45	4038.28	38511.42	15693.47	1686.39	518.56	66.87	13.85	6182.71	7756.28	4474.58		
6400.38	23445.63	1633.11	30524.12	15935.73	1341.78	211.54	138.89	21.95	1900.84	8654.64	7818.76		
6124.48	11150.85	930.05	17208.85	8642.12	1012.84	437.37	9.00		288.31	1469.49	5629.83		
11310.94	23451.70	2168.77	36315.85	15823.51	1718.27	120.23	124.43	126.62	1957.41	8381.94	18565.44		
5403.63	17706.08	759.24	23980.95	11199.68	1119.68	228.46	74.06		573.58	875.39	9272.00		
9352.16	7211.66	766.47	39154.80	22473.55	2589.17	150.68	235.05		558.12	8745.93	9411.79		
5353.96	17944.84	1191.92	26520.45	12841.61	1872.32	188.07	6.40	140.49	405.42	2028.98	8839.87		
11494.87	128007.81	8775.81	148777.33	111833.28	4502.10	675.81	819.57	3885.64	6654.16	7727.63	13834.83		
15740.68	70952.60	4670.05	84923.39	50636.70	8279.38	1131.98	498.25	2701.28	1515.87	6354.61	22485.84		
7559.77	21237.74	5383.92	35181.43	21575.18	1263.02	190.78	337.22	1065.49	1761.68	1907.07	7070.99		
6646.40	18185.85	1884.07	21179.82	9518.21	1265.95	105.76	45.75	137.19	812.66	1595.64	7708.68		
7653.54	19257.65	3789.56	30650.77	13392.81	1387.80	143.19	312.55		958.31	5140.43	2539.65		
19444.94	76355.64	10857.45	104169.08	56574.89	8126.76	899.27	335.45		8412.89	14185.81	30873.97		
13673.02	17761.47	1479.77	31614.28	18394.86	1765.06	278.20	172.09	31.15	2687.76	2129.19	11706.46		
5748.49	39712.61	1816.65	89271.75	31905.01	2944.21	517.27	151.02	193.42	551.87	3398.37	10210.66		
8636.00	24396.52	6556.66	39758.20	20468.67	1634.26	646.37	449.44	92.98	1830.26	4945.96	10180.58		
14840.60	23400.78	8419.64	41679.11	18855.41	2216.00	138.86	237.97	252.40	1589.90	3976.98	14339.14		
8764.51	14462.50	2792.86	27948.17	14653.72	1455.91	987.65	32.45		908.58	1934.91	8440.95		
2549.46	20348.58	8165.51	32063.58	13011.14	1213.89	85.35	252.56	138.00	4296.07	7334.78	5684.86		
67399.90	10076.24	528.13	16239.27	6832.64	1085.82	101.70	68.78	.....	531.27	2354.80	5304.61		
4583.36	33408.80	5547.09	48537.75	37303.66	1592.87	569.85	11.55	9.41	3171.19	5502.82	5476.80		
9102.02	20147.48	3177.83	31626.33	14698.44	1419.41	163.74	86.18	27.80	861.18	2459.79	11650.79		
9177.46	16176.56	1766.95	24190.96	14370.49	1339.65	199.20	139.68	6.80	199.58	1580.81	6736.07		
6606.86	14168.74	2352.84	21214.94	10049.15	952.59	120.68	196.90	166.66	533.81	2954.61	7161.38		
9080.18	28706.90	1832.67	39569.67	30717.83	8096.37	114.48	519.65	14.04	1391.21	3861.57	10164.67		
6373.77	16148.90	711.06	23435.03	10592.30	958.07	199.74	52.51	827.11	675.05	4664.81	5675.94		
6083.39	15831.43	1689.20	23295.92	13873.29	1871.86	865.28	55.86		638.30	1443.15	5149.19		
8719.77	77070.17	9647.78	96587.72	63431.68	8566.18	460.32	1072.53	288.43	749.45	15212.34	12876.81		
8717.69	10118.99	1833.74	15569.73	7172.46	600.18	210.51	47.92	4.76	441.70	2445.18	4447.06		
9484.01	27857.15	2308.83	39670.68	21887.21	1100.85	479.28	66.50	5.96	1000.24	2882.56	12898.48		
77998.94	2396455.28	810770.37	3209889.59	1707886.51	166167.09	89919.87	10028.85	26393.53	14898.94	597056.27	876900.88		

## ABSTRACT [C]—

## EXAMINATION

Counties.	Number and Classes of Certificates Issued.										Total number issued.	
	First.		Second.		Third.		Special.		Kind er-r-on.*			
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Females.	Males.	Females.	
Adair.....	4	38	10	78	16	100				20	211	
Adams.....	6	19	17	189						28	151	
Allamakee.....	2	17	15	78	5	68	2	9		14	167	
Appanoose.....	6	8	11	106	12	67		9	14	32	264	
Audubon.....	4	38	12	79	12	76		8		28	181	
Benton.....	14	87	80	156						44	218	
Black Hawk.....	2	35	19	184			4	19	5	25	244	
Boone.....	8	42	14	139	23	141	1	1		46	323	
Bremer.....	5	84	12	135				1	2	17	173	
Buchanan.....	6	79	16	184				8		22	217	
Buena Vista.....	8	48	6	105	8	44				12	190	
Butler.....	8	40	28	128						53	168	
Calhoun.....	5	86	9	189	9	54		9		17	236	
Carroll.....	10	34	16	91	9	45	1	6		36	176	
Cass.....	6	43	17	173	3	81		8		26	249	
Cedar.....	4	20	22	155	1	7		4		27	186	
Cerro Gordo.....	5	85	18	153	8	23	2	12		28	222	
Cherokee.....	2	31	17	146	3	26				22	206	
Chickasaw.....		80	5	65	5	45		13		10	153	
Clarke.....	2	26	18	48	28	78		1		44	153	
Clay.....	6	88	10	140	1	14	1	6		18	198	
Clayton.....	4	15	16	142	14	59	7	1		41	217	
Clinton.....	2	16	4	182	12	172	6	12		24	283	
Crawford.....	6	42	7	149	8	46	1	9	8	17	249	
Dallas.....	8	80	28	160	4	53		8		40	251	
Davis.....	9	6	18	54	16	49	1	1		44	110	
Decatur.....	6	31	15	107	16	86				37	224	
Delaware.....	2	43	5	60	7	74				14	177	
Des Moines.....	1	8	14	163			8	8	10	22	189	
Dickinson.....	2	31	7	92	1	9		1		10	153	
Dubuque.....	4	31	19	199	1	9	6	7	12	50	268	
Emmet.....	8	17	5	64	2	48		7		10	136	
Fayette.....	1	31	18	187	18	32	15	50		42	250	
Floyd.....	4	21	12	162		1	2	5	2	18	191	
Franklin.....	6	24	18	114	14	71				38	200	
Fremont.....	5	21	5	187	12	57		8		22	223	
Green.....	8	31	7	135	10	48	2	14		27	222	
Grundy.....	9	26	26	163						35	192	
Guthrie.....	12	59	12	88	17	104		1		41	233	
Hamilton.....	1	18	7	97	17	106	2	5	8	28	228	
Hancock.....	8	32	23	136	8	61		8		49	233	
Hardin.....	5	38	18	152	13	53	1	7	1	37	250	
Harrison.....	11	83	10	189			1	5		22	232	
Henry.....	8	31	17	12	6	30		3	2	31	193	
Howard.....	5	28	7	97	8	84		4		15	183	
Humboldt.....		14	8	83	10	74		2		18	173	
Ide.....	5	35	6	90		28		6		11	148	
Iowa.....	8	22	23	110	8	75	2	6		61	218	
Jackson.....	1	18	6	142	11	58				18	218	
Jasper.....	4	31	15	238				4		19	238	

# REPORT OF COUNTY SUPERINTENDENTS.

## REPORTS FOR 1905—CONTINUED.

### OF TEACHERS.

Number of rejections.		Candidates examined.	Different persons licensed.	Average age of teachers.		No experience.	Taught less than one year.		Holds state license.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
8	48	86	854	20	110	26	21	4	26
4	37	27	198	32	12	30	21 1/2	3	17
8	42	17	209	8	141	34	23	11	3
13	80	45	284	81	18	34	23	8	35
11	29	39	210	25	189	27.7	23	6	29
20	60	78	278	44	213	24	21	6	36
4	19	29	253	22	235	25	23	10	85
8	34	54	857	32	211	27	28	6	82
2	24	19	196	16	136	24	22	4	30
1	4	23	231	15	6	25	20	6	49
21	17	12	207	1	14	24	22	3	44
1	64	57	232	86	10	22	21	13	22
1	8	18	272	14	18	25	22	5	35
12	55	48	331	31	16	21	21	5	26
5	21	31	270	4	176	23	2	4	44
4	22	31	205	1	165	9	21	6	46
8	42	36	264	27	207	23 1/2	23 1/2	9	34
5	86	25	239	19	168	25 6	27 6	7	36
1	50	15	203	1	124	19	25	4	18
4	19	45	171	34	119	25	21	11	38
1	11	22	209	18	16	29	21	8	34
9	60	50	267	8	191	28	23	7	42
6	72	20	444	22	307	27	23	2	5
6	71	33	320	16	197	33	21	3	30
8	47	48	298	40	228	24	21	4	56
14	34	53	144	5	181	25	22	8	20
8	4	40	223	3	175	21	23 7	10	44
2	39	16	216	14	160	27	23	8	20
1	25	24	214	2	175	32	20	4	15
1	12	10	145	10	119	2	21 5	4	39
28	28	80	286	282	33 5	26	26	1	1
3	31	13	167	9	117	27.1	23.3	1	18
5	65	47	815	49	234	23	22	3	20
4	27	22	218	15	173	24	21	4	23
12	55	50	264	17	205	24	24	4	4
10	20	32	243	194	24	22	22	10	3
15	59	42	282	25	191	24	22	7	82
2	2	37	318	80	141	24	21	6	22
3	14	44	446	87	170	26	24	13	43
10	53	85	261	28	173	27	23	9	82
8	20	57	312	3	149	24	22	14	34
6	120	43	275	28	156	26	23	9	89
12	72	34	362	22	252	22	19	4	85
7	48	88	265	24	159	31.6	23.5	13	40
1	24	21	229	9	152	23	20	1	32
1	7	19	197	17	147	22.5	22.2	6	30
1	21	11	155	6	130	21	20	1	18
23	184	52	234	43	179	31	30	5	34
		19	228	16	213	27	24	4	4
		42	437	19	269	24	25	10	47

## ABSTRACT [C]—

## EXAMINATION

County.	Number and Classes of Certificates Issued.										Total number issued.	
	First.		Second.		Third.		Special.		Kindergarten.*			
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Females.	Males.	Females.	
Jefferson.....	4	5	14	131	6	64		3		24	103	
Johanson.....	7	35	15	292				6	3	27	340	
Jones.....	3	31	14	160					1	17	193	
Keokuk.....	13	35	49	217				1		59	253	
Kossuth.....	1	21	22	156	16	92	1	20		40	229	
Lee.....	3	7	13	179	5	51	5	9		26	246	
Linn.....	2	53	5	183	12	194	2	3		21	465	
Louisa.....	5	13	6	54	12	40				2	130	
Lucas.....	1	14	7	45	24	101				3	161	
Lyons.....	10	45	15	103	7	10	1	8		33	161	
Madison.....	6	30	14	185	7	86				27	261	
Mahaska.....	4	6	12	85	47	218	2	3		66	317	
Marion.....	7	21	6	63	17	109	2	4	1	32	198	
Marshall.....	2	14	20	137	10	74	5	12	5	37	247	
Mills.....	6	23	11	85	7	55		2		9	166	
Mitchell.....	6	15	6	141				3		11	159	
Momona.....	4	39	4	111	4	42				17	182	
Monroe.....	5	10	8	71	12	69	1	6		26	156	
Montgomery.....	11	39	5	81	5	80				21	170	
Muscatine.....	2	30	5	61	12	84		2		17	212	
O'Brien.....	5	23	13	102	10	107	1	2	1	26	230	
Osceola.....	2	13	10	79	4	37				17	131	
Page.....	4	12	4	124	4	73		4		12	213	
Palo Alto.....	4	30	18	71	7	34	1	6		34	135	
Plymouth.....	5	13	5	145	1	24				12	163	
Pocahontas.....	6	51	12	87	5	42				2	160	
Polk.....	3	131	25	202			31	112	37	59	542	
Postawattamie.....	11	113	16	231			5	26	23	37	413	
Poweshiek.....	7	34	13	90	5	45		11	8	37	184	
Ringgold.....	1	29	6	51	5	93		1		12	174	
Sac.....	10	31	8	100	7	80		4		25	215	
Scott.....	4	2	22	33			13	27		43	360	
Shelby.....	20	34	20	145						40	179	
Sioux.....	11	43	12	129	13	98	2	13		26	281	
Story.....	5	19	45	235						50	248	
Tama.....	9	42	17	196			5	7		31	245	
Taylor.....	3	41	8	43	24	104		2		35	190	
Union.....	9	29	13	85	7	31	3	4	2	32	153	
Van Buren.....	7	14	10	75	15	81		1		33	171	
Wapello.....	2	14	10	165	5	87	4	11		21	281	
Warren.....	7	24	14	115	9	59		4		30	203	
Washington.....	5	25	23	214					8	33	242	
Wayne.....	10	17	31	140	20	54				6	215	
Webster.....	5	43	9	166	6	29	5	8		2	246	
Winnebago.....	12	33	9	79	1	33		5		22	150	
Winnebleshiek.....	3	12	18	118	13	56		6	1	39	196	
Woodbury.....	5	115	6	191			4	13	12	24	336	
Worth.....	9	35	28	78						37	104	
Wright.....	3	43	20	140	13	60		5		36	248	
Totals.....	544	3,105	1,429	12,779	734	4,807	170	715	141	2,854	31,543	

\*No kindergarten certificates were issued to males.

## REPORTS FOR 1905—CONTINUED.

## OF TEACHERS.

Number of re- jections		Candidates exam- ined.		Different persons li- censed.		Average age of teachers.		No exper- ience.		Taught less than one year		Holding state license.		Members teachers' reading circle.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
3	83	37	239	31	157	26	28	6	37	1	80	3	7	.....
2	17	20	84	19	153	22	23	1	82	1	48	3	8	25
6	82	21	245	15	177	21	23	5	89	6	9	3	5	4
5	47	61	800	32	132	25	21	10	85	9	30	13	6	.....
2	17	60	453	40	209	31	22	15	5	7	60	9	24	6
1	9	27	355	25	332	33	26	6	81	6	45	5	2	89
3	20	21	431	12	416	23	21	7	6	8	134	12	42	9
2	19	31	149	19	106	28	21	12	23	14	52	3	5	.....
4	50	31	17	27	134	20	23	6	8	9	8	8	10	68
.....	9	83	171	30	145	25	22	11	21	15	27	5	10	25
8	19	80	270	26	229	34	25	7	87	7	23	4	4	145
10	87	75	474	52	233	24	22	13	45	10	29	10	6	.....
3	63	55	261	25	14	25	23	5	39	.....	23	2	8	.....
7	71	44	814	28	192	26	25	9	27	4	25	8	87	75
.....	45	21	210	22	127	28	23	6	31	1	3	1	6	.....
2	22	13	181	11	155	26	23	3	12	.....	12	4	2	101
1	11	15	193	16	158	2	3	4	47	1	2	4	10	.....
7	64	33	231	26	131	28	22	11	85	.....	9	.....	7	69
2	19	23	149	.....	.....	26	19	1	33	12	50	2	14	80
.....	.....	11	212	17	184	24	25	5	48	3	30	5	7	.....
.....	2	29	250	2	175	26	2	1	55	6	46	5	28	.....
8	41	20	172	8	134	21	23	5	33	2	35	1	5	42
8	91	15	804	11	185	29	21	2	42	2	56	7	40	117
17	13	47	255	23	100	24	20	12	5	7	31	4	5	2
7	32	19	211	1	180	25	22	2	24	4	49	5	8	50
2	5	25	233	21	15	26	22	7	4	4	45	7	13	.....
15	146	74	678	51	533	33	27	8	6	10	45	.....	.....	237
7	77	37	490	25	24	21	2	15	90	20	116	8	53	260
6	57	31	241	22	167	.....	.....	7	85	4	29	6	15	.....
.....	48	1	217	12	150	25	21	2	39	.....	15	5	8	80
2	58	27	264	1	161	31	22	6	19	8	9	7	11	.....
.....	7	43	367	4	89	34	21	1	85	2	8	9	2	.....
5	87	45	216	40	179	21	21	5	30	4	56	.....	.....	50
1	27	39	318	30	241	24	2	12	55	8	42	6	9	120
9	51	5	801	35	240	31	22	15	75	8	100	6	15	.....
8	6	31	310	28	234	31	22	10	31	5	88	6	9	102
9	21	41	211	35	165	21.3	23.8	15	21	20	61	2	11	.....
5	17	37	172	36	10	25	27	2	25	1	12	8	1	106
1	8	34	179	31	135	25	23	7	31	6	31	3	2	18
2	63	23	345	14	234	31	24	8	29	.....	3	17	.....	.....
4	16	34	318	25	177	33	21	4	31	3	26	6	5	18
2	61	57	303	21	181	28	22	17	41	4	81	6	12	33
4	15	65	230	168	25.5	22	22	5	21	2	43	4	8	.....
9	89	8	314	2	211	26	34	7	81	8	87	7	2	.....
.....	10	22	160	21	118	31.4	21	5	85	2	28	5	1	8
12	85	5	241	30	142	21	21	18	23	6	87	5	1	64
1	34	25	321	21	35	33	23	5	46	2	20	.....	.....	16
2	14	30	118	31	89	24	22	6	11	19	31	3	1	52
.....	8	31	285	27	161	21	23	8	51	7	56	4	1	.....
500	4143	3412	35742	2780	13019	26	22	612	3499	605	3781	414	1111	8143

\*Average age of teachers.

## ABSTRACT [D].

## VISITATION OF SCHOOLS, APPEALS, ETC., 1905.

Counties.	Visitation of schools.		Educational meetings.			Ap- peal.	Compensation of Co Supt.	College and private schools.				Amount paid Assistants to Co. Superintendent.
	Schools visited by Co. Supt.	Visits made during the year.	County associations.	Township meetings.	Educational meetings held.			Number.	Teachers employed.	Students attending.	Number of graduates, 1905.	
Adair.....	96	90	Yes	Yes	.....	1	\$ 1,250.00	.....	.....	.....	.....	\$ 71.00
Adams.....	42	52	No	Yes	4	.....	1,250.00	.....	5	147	.....	.....
Allamakee.....	88	9	No	No	.....	1	1,250.00	.....	.....	.....	.....	.....
Appanoose.....	51	54	Yes	Yes	.....	.....	1,250.00	.....	.....	.....	.....	.....
Audubon.....	62	65	Yes	Yes	4	.....	1,250.00	.....	.....	.....	.....	.....
Benton.....	70	65	No	No	.....	.....	1,250.00	.....	15	323	14	10.00
Black Hawk.....	109	118	No	No	4	.....	1,250.00	.....	5	91	23	350.00
Boone.....	127	152	Yes	No	2	.....	1,250.00	.....	2	11	16	140.00
Bremer.....	155	290	Yes	Yes	4	.....	1,250.00	.....	18	20	448	111
Buchanan.....	150	200	No	No	.....	.....	1,250.00	.....	4	23	27	100.00
Buena Vista.....	74	75	Yes	Yes	2	.....	1,250.00	.....	1	21	174	8
Butler.....	164	164	Yes	Yes	6	.....	1,250.00	.....	.....	.....	.....	62.75
Calhoun.....	158	210	Yes	No	3	1	1,250.00	.....	.....	.....	.....	71.50
Carroll.....	48	5	Yes	No	.....	.....	1,250.00	.....	54	1,083	24	7.00
Cass.....	40	.....	Yes	Yes	6	1	1,250.00	.....	.....	.....	.....	5.00
Cedar.....	71	84	Yes	No	2	.....	1,250.00	.....	4	5	201	81
Cerro Gordo.....	112	.....	Yes	No	1	1	1,250.00	.....	4	25	83	19
Cherokee.....	179	208	Yes	No	13	.....	1,300.00	.....	2	8	175	414.98
Chickasaw.....	110	140	No	No	.....	.....	1,250.00	.....	4	18	356	14
Clarke.....	70	82	Yes	Yes	4	.....	1,250.00	.....	.....	.....	.....	26.00
Clay.....	150	165	Yes	Yes	4	.....	1,250.00	.....	1	3	104	11
Clayton.....	215	22	No	No	4	.....	1,250.00	.....	.....	.....	.....	.....
Clinton.....	175	237	Yes	No	14	.....	1,250.00	.....	14	67	1,354	187
Crawford.....	134	130	Yes	Yes	10	.....	1,250.00	.....	10	20	357	115
Dallas.....	201	210	Yes	Yes	22	.....	1,250.00	.....	1	7	85	100.00
Davis.....	35	35	Yes	Yes	2	.....	1,250.00	.....	.....	.....	.....	130.00
Decatur.....	8	80	No	No	4	.....	1,250.00	.....	1	100	18	.....
Delaware.....	80	88	No	Yes	3	.....	1,250.00	.....	.....	16	178	9
Des Moines.....	40	42	No	No	4	.....	1,250.00	.....	7	22	626	.....
Dickinson.....	70	94	No	No	3	.....	1,250.00	.....	.....	.....	.....	.....
Dubuque.....	136	162	No	Yes	7	.....	1,500.00	.....	18	103	2,325	186
Emmett.....	109	341	Yes	Yes	5	.....	1,250.00	.....	.....	.....	.....	.....
Fayette.....	60	70	Yes	Yes	2	1	1,250.00	.....	8	34	631	114
Floyd.....	161	164	No	Yes	12	.....	1,250.00	.....	3	21	350	34
Franklin.....	104	129	No	Yes	7	.....	1,250.00	.....	.....	.....	.....	33.37
Fremont.....	81	81	No	No	1	.....	1,250.00	.....	1	14	167	6
Greene.....	125	13	Yes	Yes	1	.....	1,250.00	.....	1	4	72	4
Grundy.....	102	115	No	No	5	.....	1,250.00	.....	.....	.....	.....	.....
Guthrie.....	64	70	Yes	Yes	1	1	1,250.00	.....	.....	.....	.....	.....
Hamilton.....	81	84	Yes	No	4	.....	1,250.00	.....	2	7	101	9
Hancock.....	130	181	No	Yes	6	.....	1,250.00	.....	.....	.....	.....	287.00
Hardin.....	160	210	Yes	Yes	1	.....	1,250.00	.....	2	15	346	23
Harrison.....	5	.....	No	No	7	1	1,250.00	.....	.....	6	290	21
Henry.....	58	86	Yes	Yes	1	.....	1,248.00	.....	7	40	878	111
Howard.....	114	218	No	No	5	.....	1,250.00	.....	3	9	282	60
Humboldt.....	132	161	Yes	Yes	5	1	1,240.00	.....	.....	.....	.....	3.50
Ida.....	102	108	Yes	Yes	17	.....	1,450.00	.....	.....	.....	.....	.....
Iowa.....	146	160	No	Yes	23	.....	1,250.00	.....	5	4	311	28
Jackson.....	31	87	No	No	4	.....	1,250.00	.....	.....	.....	.....	34.00
Jasper.....	115	115	No	Yes	3	.....	1,240.00	.....	1	4	55	345.00
Jefferson.....	127	136	Yes	No	8	.....	1,218.00	.....	3	23	475	29
Johnson.....	97	97	Yes	Yes	24	.....	1,250.00	.....	6	25	556	42
Jones.....	45	50	Yes	No	3	.....	1,250.00	.....	.....	.....	.....	50.00
Keokuk.....	75	90	Yes	Yes	27	1	1,250.00	.....	1	2	122	6
Kossuth.....	216	326	Yes	Yes	.....	.....	1,550.00	.....	5	18	639	56

## ABSTRACT [D]—CONTINUED

## VISITATION OF SCHOOLS, APPEALS, ETC., 1905.

Counties.	Visitation of schools.		Educational meetings.		Ap- peals.	Compen- sation of Co. Supt.	College and private school.				Amount paid assistants to Co. Superintendent.	
	Schools visited by Co. Supt.	Visits made dur- ing the year.	County associa- tions.	Township meet- ings.			Educational meetings held.	Cases decided by Co. Supt.	Received for of- ficial services from Oct. 1, 1904, to Oct. 1, 1905.	Number.		Teachers em- ployed.
Lee	180	205	No	No	2		\$ 1,250.00	2			2	
Linn	108	124	Yes	No	10		1,250.00	8	71	1188	69	\$ 240.00
Louis	75	89	Yes	No	3		1,250.00					
Lucas	77	85	Yes	Yes	2		1,250.00					
Lyon	65	65	Yes	No	8		1,250.00	1	8			
Madison	174	197	Yes	Yes	12		1,250.00					
Mahaska	70	70	No	No	8		1,250.00	1	1	438	48	
Marion	45	50	Yes	Yes	5		1,251.48	3	17	182	1	5.00
Marshall	125	125	No	No	3		1,250.00	3	53	58	50	38.00
Mills	60	72	Yes	No	2		1,250.00	1		44	4	
Mitchell	132	170	Yes	Yes	25		1,250.00	4	3	70	2	50.00
Monona	150	170	Yes	Yes	4		1,250.00					150.00
Monroe	93	100	Yes	Yes	7	1	1,250.00					
Montgomery	115	120	No	Yes	1		1,250.00					7.00
Muscatine	108	110	Yes	No	4		1,250.00	8	12	480		
O'Brien	145	190	Yes	No			1,250.00	2	1	167	23	3.00
Osceola	85	110	Yes	No	5		1,250.00		28			
Page	138	195	Yes	No	9		1,250.00	2	30	1007	21	40.00
Palo Alto	70	75	Yes	Yes	3		1,250.00	1	7	200	1	112.00
Plymouth	89	94	Yes	No	8		1,250.00	1	5	518	3	
Pocahontas	71	7	Yes	No	2		1,250.00	1	5	108	6	4.00
Polk	16	127	Yes	No	8	1	1,250.00	1	32	600	635	
Pottawattamie	120	160	No	No	10		1,800.00	4	30	90	48	600.00
Poweshiek	50	50	No	No	19	3	1,250.00	1	8	499	55	8.00
Ringgold	98	94	Yes	Yes	4		1,250.00					25.00
Sac	135	152	Yes	No	1		1,250.00	1		122	21	250.00
Scott	123	152			8		1,490.00	10	7	1350	60	47.75
Shelby	150	490	Yes	Yes	50	1	1,250.00					50.00
Sioux	30	3	Yes	No	20		1,250.00	7	2	710	50	280.00
Story	178	160	Yes	Yes	12		1,250.00		116	198	182	43.00
Tama	110	150	No	Yes	18		1,250.00	8	27	38	27	215.50
Taylor	50	90	Yes	No	6		1,250.00					26.75
Union	175	15	Yes	Yes	4		1,250.00	1	170		19	40.00
Van Buren	10	15	Yes	Yes	8	1	1,250.00					
Wapello	81	80	No	No	4		1,252.00	3	10	400	12	505.00
Warren	10	140		Yes	8		1,250.00	1	50	900	60	21.00
Washington	132	130	No	Yes	9		1,250.00		2	390	32	
Wayne	145	58	Yes		2		1,250.00					4.65
Webster	101	116	Yes	No	1		1,250.00	8	20	45	30	117.00
Winnebago	102	16	Yes	No	4	1	1,250.00	1	10	210	10	
Winnechick	80	90	No	Yes	6		1,250.00	10	45	1787	60	10.00
Woodbury	60	78	Yes	Yes	4	1	1,580.00	8	2	880	60	
Worth	109	135	Yes	Yes	6		1,250.00					
Wright	190	377	Yes	Yes	68		1,250.00	1			3	200.00
Total	10408	1367	*	†	795	2	\$125,889.48	270	1,848	40721	3,302	\$7,043.55

\*Yes 65, No 32, Not reporting 1.

†Yes 51, No 46, Not reporting 2.

## ABSTRACT [D].—CONTINUED.

## SUMMARY OF SUPERINTENDENTS' WORK, 1905.

Counties.	Schoolrooms.	Number schools visited.	Number different visits.	Days consumed in examinations.	Candidates examined.	Certificates granted.	Number teachers necessary.	Counties.	Schoolrooms.	Number schools visited.	Number different visits.	Days consumed in conducting examination.	Number candidates examined.	Number certificates issued.	Number teachers necessary.
Adair .....	161	90	90	75	892	241	165	Johnson .....	232	97	97	10	876	85	228
Adams .....	139	42	55	78	215	174	135	Jones .....	179	50	45	70	248	210	187
Allamakee .....	158	92	88	36	226	181	156	Keokuk .....	204	75	90	52	864	812	209
Appanoose .....	208	61	54	8	329	236	208	Kossuth .....	272	216	826	.....	616	829	.....
Audubon .....	129	62	60	60	249	200	138	Lee .....	205	13	205	50	282	272	216
Benton .....	276	60	63	50	346	257	188	Linn .....	402	106	122	72	509	456	402
Black Hawk .....	25	109	118	78	292	269	274	Louis .....	114	75	89	42	174	153	122
Boone .....	221	127	182	25	411	366	231	Lucas .....	128	85	77	.....	247	193	180
Bremer .....	148	158	290	48	215	189	134	Lyon .....	16	65	65	40	208	194	170
Buchanan .....	194	5	200	100	244	289	197	Madison .....	175	174	195	30	334	278	178
Buena Vista .....	179	74	75	100	219	202	17	Mahaska .....	243	70	70	.....	479	842	336
Butler .....	151	164	164	48	389	304	192	Marion .....	180	45	50	50	246	230	206
Calhoun .....	188	198	210	75	290	257	199	Marshall .....	245	125	125	48	332	234	240
Carroll .....	181	43	51	48	279	212	133	Mill .....	152	60	72	90	284	184	131
Cass .....	196	40	.....	.....	301	255	.....	Winchester .....	142	132	174	40	194	170	155
Cedar .....	177	79	85	66	239	213	189	Monona .....	192	150	170	80	211	199	182
Cerro Gordo .....	211	112	.....	.....	300	250	212	Monroe .....	14	93	108	45	255	182	149
Cherokee .....	174	179	208	120	264	235	182	Montgomery .....	157	15	16	62	212	191	165
Chickasaw .....	95	110	140	41	218	163	165	Muscatine .....	156	100	110	100	281	231	186
Clarke .....	136	70	82	6	216	198	124	O'Brien .....	188	145	194	40	279	259	199
Clay .....	155	151	165	80	231	216	181	Oceola .....	115	85	110	50	192	148	114
Clayton .....	228	224	215	50	317	254	245	Page .....	198	198	135	65	819	225	201
Clinton .....	297	175	237	55	484	406	336	Palo Alto .....	182	75	70	10	802	166	168
Crawford .....	221	134	150	24	343	286	24	Plymouth .....	225	89	94	6	24	201	214
Dallas .....	222	201	210	57	341	291	222	Pocahontas .....	175	71	71	83	218	203	177
Davis .....	123	35	35	40	202	154	125	Polk .....	492	127	96	94	732	601	635
Deaatur .....	159	80	68	68	265	26	169	Pottawattomie .....	415	120	160	13	559	445	900
Delaware .....	172	80	88	88	432	191	171	Poweshiek .....	190	50	50	60	272	240	199
Des Moines .....	218	40	42	75	248	212	.....	Ringgold .....	173	93	94	.....	284	186	168
Dickinson .....	101	70	94	88	135	148	105	Sac .....	181	135	138	140	295	240	189
Dubuque .....	259	186	162	6	316	288	.....	Scott .....	297	12	152	170	410	404	341
Emmet .....	108	109	341	78	180	146	10	Shelby .....	177	150	400	50	261	219	193
Fayette .....	250	64	70	65	362	292	255	Sioux .....	236	80	80	94	34	310	250
Floyd .....	168	164	164	54	240	204	14	Story .....	218	175	199	40	26	298	210
Franklin .....	164	104	129	45	314	247	176	Tama .....	140	111	159	40	839	276	243
Fremont .....	171	81	81	50	275	243	17	Taylor .....	177	58	92	72	255	225	178
Greene .....	176	125	134	60	324	350	18	Union .....	168	175	150	74	209	187	171
Grundy .....	151	102	115	26	235	217	157	Van Buren .....	150	15	15	35	213	214	150
Guthrie .....	194	60	70	43	240	273	202	Wapello .....	217	81	88	90	168	308	261
Hamilton .....	185	84	84	.....	819	236	187	Warren .....	188	101	140	82	232	232	184
Hancock .....	164	137	150	65	299	271	169	Washington .....	141	182	147	55	36	375	162
Hardin .....	201	140	210	65	318	237	214	Wayne .....	18	145	235	85	295	278	163
Harrison .....	218	50	.....	51	395	255	.....	Webster .....	261	101	118	78	366	269	261
Henry .....	41	58	60	30	301	224	.....	Winnebago .....	117	105	180	60	14	172	125
Howard .....	127	11	215	16	217	195	132	Winneshiek .....	181	80	90	6	335	285	181
Humboldt .....	142	132	164	50	216	191	142	Woodbury .....	320	64	78	49	856	847	405
Ida .....	184	103	200	.....	186	151	15	Worth .....	11	109	185	60	137	141	109
Iowa .....	7	146	160	75	286	264	190	Wright .....	193	190	807	3	292	284	264
Jackson .....	204	81	37	63	247	236	204	Total .....	18,470	10,487	12,446	5,322	39,195	24,402	18,886
Jasper .....	251	115	115	30	469	312	230								
Jefferson .....	125	127	130	.....	263	247	129								

## REPORT OF COUNTY SUPERINTENDENTS.

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## ABSTRACT [D]—CONTINUED.

## SUMMARY OF SUPERINTENDENT'S WORK, 1905.

Counties.	New schoolhouses.	Whole number.	Good.	Fair.	Poor.	Without suitable and separate outb'g for each sex.	Schoolhouses provided with flags.	Counties.	New schoolhouses.	Whole number.	Good.	Fair.	Poor.	Without suitable and separate outbuildings for each sex.	Schoolhouses provided with flags.
Adair.....	1	189	78	56	10	8	.....	Johnson.....	4	172	142	25	5	2	.....
Adams.....	1	112	92	15	1	.....	.....	Jones.....	.....	139	60	70	9	23	90
Allamakee.....	2	184	103	29	2	78	.....	Keokuk.....	22	146	97	48	6	.....	80
Appanoose.....	3	134	25	77	86	14	.....	Kossuth.....	2	226	103	61	62	98	6
Audubon.....	.....	111	82	23	6	44	.....	Lee.....	1	124	40	29	15	10	45
Benton.....	1	187	142	41	4	10	118	Linn.....	3	208	171	22	10	.....	130
Black Hawk.....	4	136	54	60	42	19	43	Louis.....	1	90	52	27	11	7	51
Boone.....	2	157	108	46	8	149	.....	Lucas.....	2	99	67	26	6	.....	42
Bremser.....	.....	112	92	14	6	1	68	Lyon.....	6	189	84	34	21	24	24
Buchanan.....	.....	150	107	49	8	20	50	Madison.....	4	143	48	60	40	.....	35
Bureau Vista.....	4	140	40	61	40	0	41	Mahaska.....	3	157	102	58	15	.....	75
Butler.....	2	147	80	61	6	75	.....	Marion.....	2	158	79	61	18	.....	35
Calhoun.....	2	149	60	78	14	5	88	Marshall.....	.....	182	76	46	80	.....	60
Carroll.....	2	149	80	32	.....	54	.....	Miller.....	.....	92	20	72	.....	.....	18
Cass.....	2	155	77	68	10	.....	.....	Mitchell.....	.....	107	54	21	30	.....	54
Cedar.....	4	145	112	29	4	15	85	Monona.....	3	152	128	20	6	1	50
Cerro Gordo.....	3	145	94	54	4	.....	.....	Monroe.....	2	164	84	53	17	65	12
Cherokee.....	2	144	1	26	6	20	15	Montgomery.....	1	114	28	88	1	1	85
Chickasaw.....	2	141	141	5	6	108	16	Muscatine.....	.....	106	80	88	40	1	108
Clarke.....	2	108	52	38	20	108	16	O'Brien.....	.....	141	78	61	5	.....	141
Clay.....	1	132	104	28	4	15	180	Osceola.....	1	84	42	50	2	7	75
Clayton.....	.....	184	144	10	5	25	40	Page.....	2	140	75	53	12	.....	53
Clifton.....	4	184	128	58	5	180	.....	Palo Alto.....	.....	133	104	22	7	.....	100
Crawford.....	3	130	143	13	2	10	24	Plymouth.....	3	182	112	63	2	.....	24
Dallas.....	2	154	11	26	15	6	.....	Pocahontas.....	1	144	119	19	.....	2	71
Davis.....	1	103	46	37	21	.....	.....	Polk.....	5	192	114	60	18	.....	79
Decatur.....	3	123	44	75	4	121	.....	Pottaw't'mie.....	4	251	226	19	1	3	250
Delaware.....	2	148	124	14	2	3	.....	Poweshiek.....	2	145	115	23	7	1	68
Des Moines.....	2	99	78	18	5	.....	.....	Ringgold.....	1	135	55	65	14	.....	12
Dickinson.....	.....	74	6	4	.....	.....	.....	Sac.....	2	144	78	87	29	8	15
Dubuque.....	1	151	61	60	85	17	85	Scott.....	1	127	105	20	2	8	.....
Emmet.....	2	15	66	12	7	1	37	Shelby.....	1	148	100	31	10	.....	140
Fayette.....	.....	191	87	98	6	2	12	Sioux.....	.....	187	70	100	17	26	.....
Floyd.....	.....	124	44	41	18	.....	.....	Story.....	.....	152	74	46	82	.....	98
Franklin.....	3	144	122	12	10	4	.....	Tama.....	2	183	102	61	20	.....	90
Freemont.....	1	129	106	18	1	.....	.....	Taylor.....	5	139	97	18	14	.....	10
Greene.....	3	145	84	97	10	28	.....	Union.....	3	122	64	57	1	.....	52
Grundy.....	1	125	21	98	12	85	0	Van Buren.....	1	115	86	76	4	9	53
Guthrie.....	1	151	58	80	21	.....	2	Wapello.....	4	118	57	58	1	1	68
Hamilton.....	4	144	76	40	80	.....	74	Warren.....	.....	146	82	47	17	3	30
Hancock.....	3	136	12	34	.....	54	.....	Washington.....	2	139	54	70	18	.....	64
Hardin.....	1	148	86	34	25	105	.....	Wayne.....	4	140	101	18	11	4	.....
Harrison.....	4	162	81	49	3	.....	.....	Webster.....	4	190	126	54	10	8	55
Henry.....	.....	109	7	34	8	.....	70	Winnebago.....	.....	94	48	56	10	1	20
Howard.....	2	106	77	76	4	.....	.....	Winneshek.....	1	150	98	48	7	1	10
Humboldt.....	1	112	11	99	4	.....	8	Woodbury.....	.....	115	84	122	16	10	105
Ia.....	1	107	41	60	6	.....	85	Worth.....	.....	97	72	18	1	6	30
Iowa.....	1	148	70	48	80	2	29	Wright.....	8	141	80	108	.....	.....	180
Jackson.....	.....	158	62	85	3	147	81	Total.....	.....	18,934	8,098	4,592	1,268	67	5,892
Jasper.....	3	191	113	64	15	.....	51								
Jefferson.....	2	101	88	60	6	8	50								

## ABSTRACT [E]—

## TEACHERS'

County.	Where held.	Sessions.			Teachers in Attendance.			
		Commencing	Cont'g weeks.	Number daily.	Males.	Females.	Total.	Graduates.
Adair .....	Greenfield .....	July	10	2	1	12	178	182
Adams .....	Corning .....	June	19	2	2	6	129	135
Allamakee .....	Waukon .....	August	14	2	2	8	154	162
Appanoose .....	Centerville .....	August	14	2	2	84	177	212
Audubon .....	Audubon .....	July	11	2	1	18	119	182
Benton .....	Vinton .....	July	17	2	2	47	215	260
Blac Hawk .....	Waterloo .....	July	31	2	2	11	192	208
Boone .....	Boone .....	August	14	2	2	89	239	278
Bremer .....	Waverly .....	July	10	1	1	6	124	135
Buchanan .....	Independence .....	August	7	1	1	18	187	200
Buena Vista .....	Storm Lake .....	July	24	2	2	6	191	194
Butler .....	Shell Rock .....	July	24	2	2	27	153	180
Calhoun .....	Rockwell City .....	August	14	1	2	17	165	186
Carroll .....	Carroll .....	June	19	2	2	23	197	207
Cass .....	Atlantic .....	June	19	2	1	9	174	183
Cedar .....	Tipton .....	June	19	2	2	11	141	155
Cerro Gordo .....	Mason City .....	August	14	1	2	23	204	227
Cherokee .....	Cherokee .....	June	19	2	2	12	185	197
Chickasaw .....	New Hampton .....	July	24	2	2	8	150	158
Clarke .....	Oceola .....	July	24	2	2	8	114	134
Clay .....	Spencer .....	July	17	2	2	10	128	188
Clayton .....	Elkader .....	July	17	2	2	22	206	228
Clinton .....	Clinton .....	August	21	1	1	17	818	830
Crawford .....	Oenison .....	August	7	1	2	7	204	211
Dallas .....	Adel .....	July	31	2	2	45	206	251
Davis .....	Bloomfield .....	August	21	2	2	47	106	156
Decatur .....	Leon .....	July	14	2	2	34	115	189
Delaware .....	Manchester .....	August	7	2	2	7	150	157
Des Moines .....	Burlington .....	June	19	2	2	13	166	179
Dickinson .....	Spirit Lake .....	August	14	2	2	8	114	121
Dubuque .....	Dubuque .....	August	21	1	2	12	340	812
Emmet .....	Estherville .....	August	21	1	2	8	112	120
Fayette .....	Fayette .....	July	8	2	2	9	211	220
Floyd .....	Charles City .....	June	12	4	2	6	183	189
Franklin .....	Hampton .....	July	17	2	2	19	168	187
Freemont .....	Sidney .....	August	14	1	2	13	147	160
Greene .....	Jefferson .....	June	19	1	2	1	161	178
Grundy .....	Grundy Center .....	June	26	1	2	16	122	128
Guthrie .....	Guthrie Center .....	August	7	1	2	29	152	161
Hamilton .....	Webster City .....	August	10	2	2	30	200	226
Hancock .....	Garner .....	August	14	2	2	20	120	140
Hardin .....	Edora .....	July	24	2	2	20	130	200
Harrison .....	Logan .....	July	31	2	2	4	138	194
Henry .....	Mount Pleasant .....	June	19	1	2	17	167	184
Howard .....	Cresco .....	March	27	2	2	15	140	155
Humboldt .....	Humboldt .....	July	10	5	1	2	53	57
Ida .....	Humboldt .....	July	31	1	2	7	141	148
Ida .....	Ida Grove .....	March	27	2	2	12	136	138
Iowa .....	Marengo .....	July	24	1	2	15	169	194
Jackson .....	Bellevue .....	July	11	3	2	6	148	154
Jasper .....	Newton .....	July	8	2	2	20	262	107

## REPORT FOR 1905.

## NORMAL INSTITUTE.

Institute fund.								
Receipts.					Total.	Expenditures.		
On hand at last report.	Examination fees.	Registration fees.	State Appointments.	County appointments and salaries.		Instruction and lectures.	Incidentals.	Unexpended.
40.2.	\$ 899.00	\$ 185.00	\$ 50.00	.. .. .	\$ 604.20	\$ 465.50	\$ 28.50	\$ 110.20
172.48	240.00	135.00	50.00	23.40	619.88	431.00	28.77	106.11
292.00	245.00	162.00	50.00	.. .. .	749.00	548.07	18.75	332.18
154.50	848.00	218.00	50.00	.. .. .	782.50	571.50	77.00	114.00
53.10	276.00	182.50	50.00	4.00	515.10	438.00	28.25	48.85
318.50	417.60	263.00	50.00	.. .. .	1,047.50	641.80	218.00	188.20
254.43	330.00	208.00	50.00	.. .. .	837.43	558.85	91.11	87.47
7.00	461.00	278.00	50.00	.. .. .	796.00	606.00	65.00	85.00
.. .. .	254.00	135.00	50.00	.. .. .	489.00	340.00	78.89	20.61
111.48	829.00	300.00	50.00	.. .. .	690.48	535.00	28.25	82.15
97.67	265.00	197.00	50.00	.. .. .	609.67	439.93	37.30	82.47
26.70	337.00	180.00	50.00	.. .. .	594.00	500.00	8.00	26.00
200.06	331.00	186.00	50.00	1.00	768.06	489.00	100.10	178.96
1.99	333.00	209.00	50.00	.. .. .	583.95	532.00	44.50	7.49
153.50	349.00	183.00	50.00	.. .. .	784.50	630.00	45.00	69.50
416.98	268.00	158.00	50.00	.. .. .	883.98	560.00	26.00	296.98
4.92	340.00	237.00	50.00	.. .. .	631.92	378.00	20.25	213.67
301.63	297.00	197.00	50.00	.. .. .	983.69	583.00	20.35	330.34
14.96	243.00	158.00	50.00	.. .. .	470.98	416.00	.. .. .	54.98
95.82	245.00	184.00	50.00	.. .. .	534.82	383.00	35.00	106.82
108.92	275.00	198.00	50.00	.. .. .	571.99	446.80	61.00	65.69
690.83	386.00	228.00	50.00	.. .. .	1,274.81	760.00	181.50	333.31
331.62	502.00	381.00	50.00	.. .. .	1,213.62	684.65	161.42	367.55
132.66	391.00	211.00	50.00	.. .. .	774.56	561.25	104.83	108.96
17.66	379.00	231.00	50.00	.. .. .	697.66	614.85	60.00	22.81
9.04	219.00	155.00	50.00	.. .. .	483.04	363.25	17.75	52.04
.. .. .	305.00	189.00	50.00	.. .. .	494.00	345.00	43.20	106.80
96.16	277.00	157.00	50.00	.. .. .	582.18	523.00	48.25	8.88
124.77	247.00	179.00	50.00	.. .. .	602.77	407.00	69.50	126.27
10.24	183.00	122.00	50.00	.. .. .	370.24	323.00	9.25	25.89
.. .. .	351.00	218.00	50.00	.. .. .	714.80	533.00	124.75	51.05
10.78	203.00	120.00	50.00	.. .. .	380.78	290.00	78.70	17.08
83.04	394.00	230.00	50.00	.. .. .	787.04	645.13	66.70	45.21
177.40	265.00	189.00	50.00	.. .. .	611.40	510.00	50.00	71.40
187.07	344.00	197.00	50.00	.. .. .	708.07	515.00	52.88	140.27
99.21	301.00	160.00	50.00	.. .. .	610.21	365.25	18.00	226.96
185.10	378.00	178.00	50.00	.. .. .	711.10	589.60	70.80	51.80
.. .. .	290.00	188.00	50.00	.. .. .	478.94	370.00	49.34	159.59
369.45	311.00	181.00	50.00	181.85	1,062.80	870.00	58.50	634.30
77.50	328.00	228.00	50.00	.. .. .	701.57	665.00	10.50	26.00
213.60	339.00	146.00	50.00	.. .. .	732.60	494.00	88.66	205.94
334.60	361.00	200.00	50.00	.. .. .	835.00	641.50	93.50	100.00
307.08	426.00	184.00	50.00	22.00	1,008.08	402.87	21.85	573.31
.. .. .	343.00	184.00	50.00	.. .. .	576.00	519.75	56.25	.. .. .
53.54	280.00	177.00	50.00	50.00	610.54	488.00	41.85	83.69
198.98	230.00	148.90	50.00	.. .. .	634.88	557.50	17.85	249.51
180.00	206.00	128.00	50.00	.. .. .	534.00	360.00	.. .. .	164.00
11.99	216.00	184.00	50.00	.. .. .	561.99	518.00	33.99	25.10
25.25	374.00	154.00	50.00	.. .. .	513.25	365.50	59.00	67.75
31.45	304.00	307.00	50.00	.. .. .	601.45	630.00	118.85	143.60

## ABSTRACT (E)—

## TEACHERS\*

Counties.	Where held.	Sessions.		Teachers in attendance.				
		Commencing.	Count'g weeks.	Number daily.	Males.	Females.	Total.	Graduates.
Jefferson.....	Fairfield.....	June 16	1	2	12	149	153	...
Johnson.....	Iowa City.....	July 17	2	2	7	193	202	2
Jones.....	Wyoming.....	July 24	1	1	11	161	172	...
Keokuk.....	Sigourney.....	Aug. 14	7	3	26	218	249	9
Kossuth.....	Algona.....	June 14	2	1	21	196	217	...
Lee.....	Ft. Madison.....	Aug. 14	11	2	15	163	178	...
Linn.....	Marion.....	Aug. 7	1	2	42	392	434	...
Louis.....	Wapello.....	June 16	2	2	27	109	136	...
Lucas.....	Chariton.....	June 20	1	2	15	118	133	...
Lyon.....	Rock Rapids.....	July 8	2	2	16	121	139	...
Madison.....	Winterset.....	July 3	1	2	14	185	199	...
Mahaska.....	Okauchosa.....	July 24	2	2	25	234	259	...
Marion.....	Knoxville.....	July 16	3	2	19	161	180	11
Marshall.....	Marshalltown.....	Aug. 7	2	2	14	182	196	...
Mills.....	Malvern.....	June 26	2	2	12	137	149	...
Mitchell.....	Oange.....	July 17	4	2	4	124	128	...
Monona.....	Onawa.....	Aug. 14	1	2	9	171	180	...
Monroe.....	Albia.....	July 3	2	2	11	119	130	...
Montgomery.....	Red Oak.....	June 28	1	1	7	126	132	...
Muscatine.....	Muscataine.....	June 15	2	2	11	177	187	...
O'Brien.....	Primghar.....	Aug. 7	2	2	19	166	185	32
Osceola.....	Sibley.....	April 3	1	2	10	116	126	...
Page.....	Clarinda.....	July 8	2	2	12	177	189	...
Palo Alto.....	Emmetsburg.....	Aug. 21	2	2	17	174	191	...
Plymouth.....	Le Mars.....	June 16	2	2	4	162	171	...
Pocahontas.....	Pocahontas.....	Aug. 17	2	2	4	125	124	...
Polk.....	Des Moines.....	July 28	1	2	31	608	639	...
Pottawattamie.....	Council Bluffs.....	June 12	1	2	9	301	310	...
Poweshiek.....	Grinnell.....	April 8	1	2	20	156	176	...
Ringgold.....	Mt. Ayr.....	Aug. 7	2	1	11	202	213	...
Sac.....	Sac City.....	June 19	2	2	6	161	171	...
Scott.....	Davenport.....	March 23	1	2	47	308	356	...
Shelby.....	Harlan.....	Aug. 7	1	2	57	106	167	...
Sioux.....	Hawarden.....	July 1	2	2	15	147	162	...
Story.....	Nevada.....	July 10	2	2	...	...	...	...
Tama.....	Toledo.....	March 27	2	2	25	235	265	...
Taylor.....	Sedford.....	June 19	2	1	16	137	143	...
Union.....	Oreston.....	Aug. 7	1	2	12	166	178	...
Van Buren.....	Keosauqua.....	July 31	2	2	29	131	155	...
Wapello.....	Ottumwa.....	June 19	2	2	9	217	226	...
Warren.....	Indianola.....	March 20	1	3	25	177	201	...
Washington.....	Washington.....	June 12	2	2	27	195	222	...
Wayne.....	Corydon.....	June 12	1	2	40	109	206	...
Webster.....	Ft. Dodge.....	April 3	1	2	13	232	241	...
Winnebago.....	Forest City.....	Aug. 2	2	2	7	102	110	...
Winnebago.....	Decorah.....	March 27	2	2	86	20	24	...
Woodbury.....	Sioux City.....	July 15	2	1	15	218	232	...
Worth.....	Northwood.....	July 31	2	2	10	8	9	...
Wright.....	Clarion.....	Aug. 14	2	2	15	17	187	...
Totals.....			11.8	21.7	17.20	13.92	186	

\*Average.

## REPORTS FOR 1905—CONTINUED.

## NORMAL INSTITUTES.

Institute fund.								
Receipts.					Total.	Expenditures.		
Onhand at last report.	Examination fees.	Registration fees.	State appropriation.	County appropriation and sundries.		Instruction and lectures.	Incidental.	Unexpended.
\$ 183.00	\$ 279.00	\$ 155.00	\$ 50.00		\$ 667.00	\$ 340.65	\$ 23.00	\$ 293.95
148.80	418.00	208.00	50.00	61.10	731.10	650.00	161.10	112.50
	362.00	172.00	50.00		672.80	454.75	95.60	
	411.00	249.00	50.00		710.00	710.00		
208.90	538.00	217.00	50.00		1,008.90	697.78	70.00	241.20
208.46	278.00	173.00	50.00		728.46	485.00	73.20	221.26
854.37	563.00	431.00	50.00		1,901.87	1,056.10	123.20	722.02
48.10	192.00	186.00	50.00		420.10	316.00	106.10	
153.90	262.00	182.00	50.00		588.90	291.50	30.00	262.40
83.00	287.00	189.00	50.00		491.00	388.00	12.00	84.00
258.30	338.00	199.00	50.00		788.30	280.00	55.00	453.30
71.92	498.00	250.00	50.00		809.92	650.00	161.00	18.92
128.70	324.00	180.00	50.00		677.70	451.00	120.70	106.43
558.60	378.00	156.00	50.00		1,179.80	630.00	32.50	454.30
17.46	363.00	149.00	50.00	28.00	507.46	364.70	84.80	87.96
44.81	214.00	128.00	50.00	119.90	559.27	499.45	27.00	29.22
830.15	214.00	190.00	50.00		838.15	434.00	82.60	316.50
7.69	168.00	190.00	50.00		455.69	450.00	4.60	1.64
71.79	292.00	152.00	50.00		515.79	274.00	84.00	167.71
88.69	298.00	187.00	50.00		593.69	445.00	42.50	81.19
69.05	309.00	185.00	50.00		618.05	498.80	38.80	74.40
41.13	207.00	126.00	50.00	40.00	464.13	355.00	59.50	56.54
162.44	335.00	189.00	50.00		726.44	475.00	170.80	90.57
14.00	338.00	191.00	50.00		591.00	520.00		71.00
295.20	263.00	171.00	50.00		779.20	400.00	137.00	242.20
2.05	316.00	129.00	50.00		496.05	439.00	53.60	4.45
109.37	896.00	659.00	50.00		1,664.37	823.75	541.17	318.45
881.99	653.00	810.00	50.00		1,994.99	873.80	213.90	807.71
1.67	818.00	178.00	50.00	24.14	864.81	408.00	56.90	98.86
78.64	359.00	218.00	50.00		593.64	553.70	25.94	18.00
118.80	396.00	171.00	50.00		675.80	547.25	35.70	92.85
612.73	416.00	860.00	50.00		1,429.73	482.10	123.50	825.07
6.00	318.00	167.00	50.00		523.00	464.02	47.20	16.78
127.89	401.00	162.00	50.00	38.40	774.31	537.00	56.00	151.31
132.65	394.00	174.00	50.00		740.65	406.00	151.35	184.10
154.82	889.00	258.00	50.00		861.82	470.00	115.45	276.87
163.30	292.00	148.00	50.00		655.30	640.00		15.30
620.16	247.00	178.00	50.00		1,095.16	867.00	85.00	643.15
190.37	234.00	150.00	50.00	1.00	664.87	378.00	34.00	229.87
276.07	380.00	226.00	50.00		941.07	645.00	28.50	276.57
256.09	288.00	261.00	50.00		799.09	331.50	97.55	310.24
329.60	390.00	228.00	50.00		988.60	598.00	86.50	804.10
114.00	393.00	206.00	50.00		693.00	432.04	40.00	219.96
390.33	414.00	261.00	50.00	2.25	1,107.48	562.85	103.35	441.28
18.00	237.00	110.00	50.00		405.60	385.00	17.00	8.60
225.59	360.00	242.00	50.00		867.89	558.30	107.96	201.68
11.78	506.00	229.00	50.00		800.78	649.00	99.90	51.88
71.53	192.00	92.00	50.00		406.85	267.00	10.00	128.85
18.00	388.00	187.00	50.00		598.80	512.00	66.50	16.10
\$14,885.13	\$3,768.00	\$19,075.00	\$4,960.00	\$540.96	\$7,214.08	\$49,110.97	\$6,685.30	\$16,417.85

## TEACHERS NORMAL INSTITUTE ABSTRACT [E]—CONTINUED.

Counties.	Conductors.	Instructors.
Adair.....	Ella C. Chantry....	L. N. Gerber, Adam Pickett, W. R. Andrews, Katie McGuire, D. R. Earle, E. R. Thomas.
Adams.....	A. B. Lewis.....	J. L. Mishler, A. M. M. Dornon, J. A. Griffith, J. W. Fowler, F. J. Realer, Jas. F. Bryan.
Allamakee....	J. E. Mills.....	S. Y. Gillan, H. A. Dwelle, F. H. Bloodgood, Alice E. Wilson, Arthur Wilson.
Appanoose....	W. M. Speers.....	Wm. Solomon, F. E. King, P. B. Woods, G. W. Bryan, Libbie Deas, E. N. Gibson, A. N. Palmer, Frederick E. Bolton.
Audubon.....	Arthur Farquhar....	F. E. Palmer, D. P. Repass, F. J. Mantz, F. A. Nims, Ella M. Stearns, Lura Beason.
Benton.....	O. R. Lowe.....	George A. Luxford, Anna E. Odland, Blanche Goudy, Mrs. O. J. Laylander, Geo. H. Betts, J. E. Stout.
Black Hawk....	Chas. Elliott.....	A. N. Clifford, Wm. Radebaugh, L. H. Minkel, Sarah A. Sprague, Abbie A. Hunter, Karl B. Steim, Malta Mishler.
Boone.....	R. R. Cobb.....	J. C. King, I. O. Welty, M. N. Seddall, E. E. Bentley, Clara E. Thompson, E. L. Osburn, Lois Moberg.
Bremer.....	John T. Remick....	W. F. Cramer, Thos. J. Durant, W. F. Davidson, Alice Cary Wilson.
Buchanan.....	M. J. Goodrich....	Edwin Duke, Agnes M. Patterson, Ida B. Hullerman, Mildred I. Goodrich, Emilie Seltzer, Adda B. Patterson, R. B. Hasner, Ruby L. Peck.
Buena Vista..	A. V. Storm.....	W. J. Bell, A. C. Fuller, Agnes M. Hannum.
Butler.....	Ida F. Leydig.....	C. A. Fullerton, W. H. Bender, C. P. Colgrove, Maud Summers, Charlotte King, J. F. Overmyer, G. H. Betts.
Calhoun.....	W. R. Sandy.....	Preston W. Search, Avis Wescott, G. W. Young, Theodore Saam, A. B. Alderman, L. C. Bryan, David Patten.
Carroll.....	W. J. Barloon.....	R. C. Barrett, F. L. Hoffman, C. J. Johnson, C. F. Schell, E. L. Coburn, Julia Scurry.
Cass.....	Bertha A. Johnson..	W. E. Salisbury, O. J. McManus, D. C. Nelfert, W. J. Cattell, Ralph R. Cobb, Anna O. Temple, Effie Shaneman.
Cedar.....	Geo. H. Kellogg....	E. L. Coburn, Jessie E. Hall, Elizabeth Bain, S. H. Mett, C. R. Aurner, Paul S. Tiler.
Cerro Gordo..	P. O. Cole.....	Wilbur H. Bender, H. H. Holmes, Wm. V. Pooley, Sarah E. Sprague, E. Blanche Renne, Mary G. Long.
Cherokee.....	A. V. Storm.....	Ruth Adsit, J. R. Bayley, J. H. Beveridge, Charles E. Blodgett, John E. Cameron.
Chickasaw....	F. J. Conley.....	C. L. Woodfield, E. C. Hill, F. A. Schantz, T. J. Wormley, Julia Scurry.
Clarke.....	W. C. Davis.....	J. R. McComb, G. E. Wright, Mrs. I. F. Ware, Katherine M. Davis.
Clay.....	H. F. Fillmore....	C. J. Boyington, A. P. Heald, A. H. Avery, Mary Riley, E. G. Clark, Thos. H. McBride.
Clayton.....	C. J. Adam.....	Robt. Rainow, O. F. Pye, J. N. Dahm, H. L. Adams, G. E. Fiach, Lillian Bridgeford.
Clinton.....	George E. Farrell..	Frank H. Hall, Preston W. Search, Wm. I. Crane, Abigail Lynch, Alice Rogers, Eleanor Flanagan.
Crawford....	F. L. Hoffman.....	W. C. Van Ness, J. H. Beveridge, W. J. Barloon, Bertha Cadwell, John E. Cameron, W. S. Mitchell, A. N. Palmer.
Dallas.....	R. F. Wood.....	W. B. Thornburgh, W. H. Gemmill, E. J. Pollock, W. M. Tarr, Emily Wagner, J. W. Graham, C. F. Barrows, Oscar Bogue.
Davis.....	W. F. Barr.....	Wilbur York, C. N. Spicer, Charlotte Sweeney, Carrie Davis.
Decatur.....	Elm Hutchinson....	J. M. Pierce, F. P. Reed, A. L. Lyon, Mabel Horner, J. M. Howell.
Delaware.....	Frank D. Joseph ..	Geo. H. Betts, C. B. Scroggie, W. B. Guthrie, J. E. Vance, Amy Boggs, Blanche Goudy.
Des Moines..	Howard A. Mathews..	R. B. Crouse, F. M. Fultz, Maurice Ricker, Josephine B. Burt, W. L. Shuts, C. Emma Foster.
Dickinson....	N. F. Davidson....	W. S. Wilson, R. S. Whitley, C. J. Boyington, M. B. Hassel, Mary Riley.
Dubuque.....	P. J. Schroeder....	Henry Honek, Frances Wright, Alice Hopper, W. B. Guthrie, T. M. Irish, F. T. Oldt, J. N. Walsh, L. L. Lightcap.
Emmet.....	A. V. Storm.....	W. H. Bender, J. L. Mishler, A. P. Hargrave, Ida L. Davis, W. V. Howard.
Fayette.....	H. L. Adams.....	Jolly Twitchell, J. E. Stout, Margaret McCauley, J. E. Moore, A. E. Bennett.

## TEACHERS NORMAL INSTITUTE—ABSTRACT [E] CONTINUED.

Counties.	Conductors.	Instructors.
Floyd .....	Frederick Schaub..	C. A. Kent, W. F. Finks, W. G. Baab, E. F. Fisher, S. K. Pitts, E. O. Hill, L. Viola Waller, Bertha Cadwell.
Franklin.....	S. M. Campbell.....	A. T. Hukill, O. W. Maxwell, F. H. Bloodgood, Paul F. Voelker, J. E. Cameron, Sarah E. Sprague.
Fremont .....	Mattie Lee A. Lair	C. S. Cobb, Walter S. Athearn, Alice E. Hopper, Rilla Shoemaker, R. D. Dougherty, Nellie Fisher.
Greene.....	A. J. Oblinger.....	T. R. Amlie, Ruby Baughman, J. T. Bradshaw, Belle Eagleson, Nettie Troy, F. E. Palmer, H. A. Glackmeyer.
Grundy .....	J. D. Adams.....	C. L. Love, A. E. Parsons, Hattie Moore-Mitchell, P. E. McClenahan, C. E. Fleming.
Guthrie.....	M. P. Kenwerthy.	F. E. Palmer, H. E. Halsey, C. McCracken, O. V. Williams, C. W. Harlan, Miss Mary Hughes.
Hamilton .....	L. N. Gerber.....	Adam Pickett, J. C. Hagler, Elizabeth Bain, Eva J. Kephart, Elizabeth Wilson, J. M. Holaday, Ella Chantry.
Hancock .....	A. M. Deyoe.....	Hattie Moore-Mitchell, L. H. Pammel, W. J. Jerome, B. W. Hoodley, J. R. Bagge, Carl Williams, May G. Long, Jessica I. Graham.
Hardin.....	Mrs. Ella B. Chassell	A. C. Newell, F. C. Eastman, Anna E. McGovern, Della Bishop, H. E. Blackmar, A. F. Styles, Milo Hunt, Kate Boylan.
Harrison.....	D. E. Brainard.....	M. A. Reed, Bertha Caldwell, Chas. E. Blodgett, J. H. Beveridge, I. W. Howarth.
Henry.....	David Williams.....	Jeese Benjamin, C. W. Crunkbank, P. C. Hayden, Amanda Kidder, Elizabeth Dean, H. H. Packer, Stella Long.
Howard .....	Helen Chapin.....	G. A. Oliver, L. E. A. Ling, A. E. Parsons, D. L. Grannis, Mrs. O. J. Leylander, Blanche Gundy, J. R. Bowman, F. A. Welch, A. R. McCook, Ella Treat.
Humboldt .....	Clarence Messer...	E. G. Cooley, E. A. Brown, E. L. Coburn, Mrs. Hattie Moore-Mitchell, C. A. Cory.
Ide .....	J. C. Hagler.....	L. N. Gerber, W. S. Athearn, W. F. Barr, Maud Summers, Paul F. Voelker, Ed. F. Geiger.
Iowa .....	H. T. Ports.....	Preston W. Search, Hattie Moore-Mitchell, S. T. May, R. B. Crone, Bruce Francis, Jeannie Mac Gregor, K. B. Stein.
Jackson.....	O. R. Scroggie.....	B. S. Aquino, Alice K. Bovard, Bernice Banghart, Cornelia Collins, Mary G. Hancock, C. O. Dudley.
Jasper .....	J. E. Roberts.....	Preston W. Search, E. J. H. Beard, E. H. Gifford, W. H. Bender, Florabel Patterson, Mrs. F. M. Rodgers.
Jefferson .....	Anna White.....	S. A. Power, C. D. McClain, A. N. Palmer, Martha Emry, Mrs. Hattie Moore-Mitchell.
Jehason.....	L. H. Langenburg..	A. A. White, F. L. Mahannah, W. O. Wilcox, F. E. Bolton, R. W. Sice, B. Shnick, A. G. Smith, Alice Lewis, Laura Graham.
Jones.....	Clifford B. Paul...	John E. Cameron, C. F. Garrett, F. D. Joseph, C. MacDunlap, Ira W. Howarth, C. E. Buckley, Mrs. C. B. Shaffer.
Keokuk .....	Cap. E. Miller.....	J. H. Morgan, T. B. Clevenger, Chas. Yeager, Betta Perreer, Nina Lambkin, Manning Jaynes, Geo. W. Hursey, Hattie Moore-Mitchell, A. E. Winship, C. S. Hammock.
Kossuth .....	O. H. Belknap.....	H. L. Adams, C. E. Sweney, Helen Wood, Grace River, A. N. Palmer, Josephine Burling.
Lee.....	E. O. Lynn.....	G. W. Walters, W. L. Barrett, P. C. Hayden, B. L. Reid, Alice O. Wilson, Alice Immegart, Preston W. Search.
Linn .....	J. E. Vance .....	G. E. Fitch, J. R. Bayley, Alice Hopper, E. E. Watson, R. R. Lewis, C. B. Paul, M. V. O'Shea.
Louisa .....	Charles R. Wallace	C. E. Scroggie, L. Hill, J. A. McCulloch, Mary Hughes, Florence Kirtz.
Lucas .....	Laura Fitch .....	W. N. Clifford, N. E. Palmer, S. W. Rowley, Inez Kelso, Ella Courtelyou.
Lyon .....	A. W. Grisell.....	W. S. Wilson, S. T. May, C. Jay Boyington, Hilda G. Lundeen, Avis Wescott.

## TEACHERS NORMAL INSTITUTE—ABSTRACT [E]—CONTINUED.

Counties.	Conductors.	Instructors.
Madison .....	T. H. Stone.....	Adam Pickett, O. E. Smith, W. L. Porter, L. D. Salisbury, Alice Wilson.
Mahaaka .....	J. P. Dodds .....	Mrs. A. P. Tacker, Dr. Wm. A. Radebaugh, Amy Arey, L. O. Rusmiser, A. H. Sigelow, S. M. Hadley, J. M. Stoke, L. F. Bennett, Arthur Latum.
Marion.....	W. H. Lucas.....	George S. Dick, W. C. Farmer, S. G. Richards, William Solomon, A. N. Palmer.
Marshall .....	Mary E. Hostetler	Harriet Garton, Wm. Radebaugh, Mrs. Alma G. White, Wm. I. Crane.
Mills .....	W. M. Moore .....	O. P. Stewart, J. L. Conger, L. Barker, J. R. Bayley, Mabel Smith, F. O. Ensign.
Mitchell .....	J. A. Lapham.....	Geo. H. Sawyer, Sarah B. Sprague, Emma O. Moulton, M. E. Oiegaard, Kathryne Gray, Maggie Lobin, A. Fullerton, G. Weaver, M. Clyde, A. N. Palmer.
Monona .....	F. E. Lark.....	Ira W. Howerth, Mande Summers, R. O. Barrett, J. E. Bayley.
Monroe .....	R. B. Spencer.....	H. C. Hollingsworth, G. W. Walters, Wm. Solomon, W. F. Chevalier, Maisy Schreiner, M. Monte Porter.
Montgomery..	Mabel G. Hanna..	Geo. S. Dick, S. E. Thomas, E. B. Wickersham, Stella Woodford, Nellie Barton.
Muscatine ....	L. G. Focht .....	B. W. Leverich, Emma Lase, Linnie Harris, Madge Babbitt, Fred E. Bolton, Lillian Bridgeford.
O'Brien .....	Nellie Jones.....	W. H. Beader, W. N. Olifford, O. M. Elliott, S. H. Bantley, Miss Emma O. Moulton, Mrs. Ella Ford Miller.
Oscoda .....	J. P. McKinley....	W. N. Clifford, L. B. Parsons, Ira W. Howerth, Blanch Gowdy, S. H. Bantley.
Page .....	Geo. H. Colbert....	J. E. Cameron, F. M. Sultz, Lura Phillips, W. E. Salisbury, E. E. Wheeler.
Palo Alto .....	Anna E. Odland....	H. A. Welty, E. O. Meredith, K. B. Stein, O. B. Lowe, A. H. Avery, Lillian Patton, Blanch Gowdy.
Plymouth.....	I. O. Hise .....	D. M. Kelley, L. H. Wright, I. J. McDuffie, Nettie Snidow.
Pocahontas...	U. S. Vance .....	F. L. Casady, J. J. Rae, W. A. Farr, Elizabeth Hughes, A. N. Palmer.
Polk .....	Z. T. Thornburg..	Adds Blakeslee, M. L. Bartlett, W. F. Barr, W. O. Hiddell, O. H. Longwell, W. N. Clifford, O. W. Lyon, Alice Hopper.
Pettawat'mie.	O. J. McManus....	E. B. Andrews, A. R. Crook, F. O. Hartman, Isaac Loos, I. W. Howerth, S. L. Thomas, M. E. Crozier, H. E. Colby, F. O. Ensign, W. M. Clifford, M. O. Porterfield, N. Crumps, B. B. Rogers.
Poweshiek....	P. A. McMillan ....	O. A. Thornburg, E. Healey, Evangeline I. Robinson, Grace Farrell, Wm. Solomon, O. E. Douglass, A. E. Winship, J. Cameron.
Ringgold.....	Lora L. Richardson	W. F. Barr, J. W. Wilkerson, W. L. Barrett, Lula Miles, J. D. Cherryholms, Eva Kendall, Grace Munsinger.
Sac .....	A. T. Hukill.....	O. F. Garrett, Elizabeth Platt, Eugenia Kimball, John R. Blacks, G. W. Lee.
Scott .....	J. H. Jacobs .....	Ernst Otto, W. W. Stetson, W. O. Wilcox, J. B. Angell.
Shelby.....	G. A. Luxford....	W. O. Wilcox, Mande Summers, O. R. Lowe, O. W. Herr, J. H. Seymour, Allen Peterson.
Stout .....	A. V. Storm .....	S. T. May, Hattie Moore Mitchell, S. W. Mounts, E. P. Crocker, R. M. Lampman.
Story .....	I. O. Welty .....	H. A. Welty, Mrs. L. B. Carlisle, A. B. Alderman, Mrs. Mae Anderson, R. B. Cobb.
Tama .....	O. E. Brown.....	Hattie Moore Mitchell, E. J. Heenahel, A. E. Parsons, E. O. Fisk, John E. Cameron, Arthur McMurray.
Taylor .....	H. S. Ash .....	Frank E. Howard, E. M. Kuhn, F. O. Belser, Jennie M. Himes, E. R. Sanford, J. B. Dunham, Ida Ash, L. C. Rusmiser.
Union.....	Frank M. Abbott..	Ira W. Howerth, Hattie M. Mitchell, O. E. French, Lula L. Spurgeon, O. E. Klugaman.

## TEACHERS NORMAL INSTITUTE—ABSTRACT [E]—CONTINUED.

Counties.	Conductors.	Instructors.
Van Buren....	A. L. Heminger ...	David Williams, Arthur T. S. Owen, Anna L. Wertz Frank Jarvis
Wapello .....	Emma S. Nye.....	Alice Inskeep, H. H. Barrows, W. F. Chevalier, Paul F. Volker, Elizabeth Burgess, W. N. Clifford, Calla M. Hand.
Warren .....	J. W. Radebaugh..	O. E. Smith, Faye Nixon, Lillie M. Britton, Nanna Thomas, Arnold Thompkins, O. P. Colgrove, Elta Supples, O. A. Sheldon.
Washington..	Cora E. Porter....	R. E. Croone, W. O. Riddell, Ella Brown, Fred L. Whitney, E. D. Dougherty, Hattie Moore-Mitch- ell, Myrtle E. Le Compe, A. N. Palmer.
Wayne.....	L. Maude Elmore..	W. N. Clifford, Laura Bowman, Emma O. Moulton, W. L. Pugh, J. E. Bayley, Ruth A. Adair.
Webster .....	A. L. Brown.....	J. M. Greenwood, E. W. Kemp, E. O. Barrett, Ger- trude Whiting, Maude Summers.
Winnebago ..	L. O. Brown.....	R. O. Barrett, H. O. Bateman, A. P. Heald, W. H. Whitford, Florence Knor, Jennie MacGregor.
Winnechiek ..	E. J. Hook.....	H. A. Dwell, G. E. Finch, Ella Treat, Julia Breck- enridge, Mrs. Gaudran Thompson, H. O. Johnson, O. A. Russell.
Woodbury....	E. A. Brown.....	Mrs. Ida Reynolds, E. G. Thomas, R. M. Van Horns, Joyce Watson, J. G. Hebson, Helen I. Loveland, F. M. McDowell, John L. Griffith.
Worth .....	O. E. Gunderson ..	H. A. Dwell, O. P. Colgrove, Jeannie Hallengby, Grace Whitcomb, A. N. Palmer.
Wright.....	Angus Mac Donald	J. G. Grundy, E. W. Fellows, Elizabeth Bain, Lena Phillips, Jennie Wolcott, Stella MacDonald, John E. Cameron.





## STATISTICS OF CITY SCHOOLS.

CITIES HAVING A POPULATION OF MORE THAN 1,500 AND LESS THAN 3000 BY THE CENSUS OF 1905.  
REPORTED BY THE CITY SUPERINTENDENTS.

Name of School.	Name of Superintendent.	1904-1905.				Enrollment all grades.	Average attendance.	Attendance upon enrollment.	High School.				Tuition and Tuition Pupils.				No. other teachers and average salary.					
		Population 1905.	Salary of superintendent	Number months in school year.	Number years in course.				Enrollment, 1905.	After dance upon enrollment.	Enroll-ment.		Males.	Females.	Below 9th grade.		9th grade and above.		Males.	Females.		
											Males.	Females.			Males.	Females.	Males.	Females.			Males.	Females.
Anamosa.	C. E. Buckley	2,878	1,250	9	12	871	716	569	78	78	33	85	5	1	15	34	33					
Audubon.	F. P. Hocker	1,704	1,200	9	13	874	548	420	73	79	39	89	8	1	18	50	40					
Avoca.	M. E. Groser	1,818	1,200	9	12	801	453	343	68	78	36	40	8	1	11	50	48					
Beafore.	Frank E. Howard	1,946	1,200	9	12	853	510	454	82	89	46	64	7	1	18	49	42					
Bellevue.	B. S. Asquith	1,686	850	9	11	569	268	176	31	65	7	24	1	1	7	63	14					
Bloomfield.	Wm. York	2,081	950	9	12	597	56	401	67	72	51	60	2	2	10	42	11					
Claron.	E. W. Fellows	1,835	1,100	9	12	573	489	368	64	70	40	63	4	2	11	37	28					
Clear Lake.	J. W. Ficks	1,838	1,000	9	11	506	429	311	68	79	27	41	1	1	11	47	28					
Colfax.	J. L. Manner	1,538	1,200	9	12	705	601	46	77	80	51	62	9	1	13	46	38					
Corning.	A. M. M. Dornon	1,848	1,200	9	12	684	628	505	69	73	48	73	16	2	16	46	38					
Corydon.	W. L. Pugh	1,834	1,100	9	12	684	471	371	67	70	48	61	12	2	17	47	45					
Creco.	L. E. A. King	2,031	1,100	9	12	884	471	371	67	70	48	61	12	2	17	36	45					
De Witt.	Margaret Buchanan	2,531	1,400	9	11	432	282	210	49	74	19	30	4	1	19	51	91					
Eldora.	C. E. Akers	2,976	1,100	9	12	888	524	401	68	77	46	60	16	1	19	89	58					
Emmelsburg.	Milo Hunt	2,519	1,300	9	12	778	576	458	68	76	46	53	11	1	19	34	76					
Forest City.	H. O. Meredith	2,512	1,100	9	12	826	574	429	58	75	44	53	2	2	17	54	48					
Glenwood.	L. H. Maus	2,526	1,250	9	12	826	538	390	74	78	31	36	1	4	12	46	46					
Guttenburg.	J. F. Pyle	1,927	900	10	12	699	377	230	83	88	12	16	2	4	9	41	65					
Hampton.	J. E. Clayton	1,787	1,200	9	12	617	511	373	65	68	33	46	4	8	18	50	40					
Harlan.	J. W. Maxwell	2,804	1,400	9	12	774	615	503	65	83	18	18	1	1	18	49	85					
Hawarden.	A. W. Herr	2,645	1,300	9	12	834	745	603	78	80	70	90	12	1	18	51	88					
Humboldt.	S. T. May	2,019	1,200	9	12	641	551	424	67	70	42	44	1	1	15	48	67					
Ipsa Grove.	Charles S. Cory	1,631	1,100	9	12	437	443	316	81	77	32	34	10	1	11	49	40					
Ipsa Grove.	B. S. Whitley	2,089	1,400	9	12	698	610	516	71	84	36	34	11	80	18	48	68					

Jefferson.....	F. E. Palmer.....	3,481	1,850	9	19	783	654	588	67	80	71	106	7	15	4	7	104.50	7	15	283.50	2	60.00	14	48.31
Lancaster.....	Theodore Ham.....	3,812	1,840	9	19	615	651	501	76	77	49	51	8	14	12	13	400.01	10	6	350.00	2	60.00	19	47.50
Landon.....	Ed L. Kelley.....	1,618	780	9	13	511	401	801	63	81	21	30	8	8	4	5	63.00	6	10	91.35	2	50.00	9	31.28
Lebanon.....	W. H. Rye.....	1,530	1,000	9	13	513	371	312	81	78	30	85	4	2	1	5	89.84	4	15	186.00	...	...	8	42.14
Lebanon.....	J. M. Pierce.....	3,027	1,000	9	13	510	518	558	65	67	81	55	4	8	10	15	196.30	12	3	437.90	...	...	19	44.72
Manchester.....	Am. Rogers.....	3,017	1,340	9	13	531	637	558	65	83	66	45	0	5	6	8	61.98	8	22	497.70	1	65.00	14	60.00
Manchester.....	C. H. O'Connell.....	3,017	1,340	9	13	531	637	558	65	83	66	45	0	5	6	8	61.98	8	22	497.70	1	65.00	14	60.00
Manchester.....	John E. Foster.....	1,668	1,200	9	13	514	413	395	69	89	43	34	7	7	18	8	73.50	6	16	373.31	...	...	12	47.14
Manchester.....	Adam Pickett.....	1,668	1,200	9	13	514	413	395	69	89	43	34	7	7	18	8	73.50	6	16	373.31	...	...	12	47.14
Manchester.....	John O. DeMar.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	L. B. Carlisle.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	L. B. Woodfield.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	E. T. Bradford.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	G. O. Hoffman.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	George H. Sawyer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. McComb.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Farmer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Wilson.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Garretts.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Congell.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Ellish.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Morgan.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	A. C. Fuller.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	A. C. McCracken.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	O. E. Fleming.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	O. E. Auerer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. B. Young.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	O. W. Lyons.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	E. B. Wickersham.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	Rorion H. Dwell.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	E. F. Schall.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. O. Schall.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Witmer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	L. D. Salsbury.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	H. A. Kinney.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	M. A. Reed.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Farmer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Wilson.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Garretts.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Congell.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Ellish.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Morgan.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	A. C. Fuller.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	A. C. McCracken.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	O. E. Fleming.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	O. E. Auerer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. B. Young.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	O. W. Lyons.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	E. B. Wickersham.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	Rorion H. Dwell.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	E. F. Schall.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. O. Schall.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Witmer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	L. D. Salsbury.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	H. A. Kinney.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	M. A. Reed.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Farmer.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Wilson.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	W. O. Garretts.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Congell.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Ellish.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	J. E. Morgan.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	A. C. Fuller.....	3,051	1,000	9	13	476	515	311	58	71	4	20	4	8	18	13	89.34	4	3	110.00	...	...	8	48.48
Manchester.....	A. C. McCracken.....	3,051	1,000	9	13	476	515	311	58</															

## GRADED SCHOOL STATISTICS

CITIES AND TOWNS OF LESS THAN 1,500 POPULATION. REPORTED BY  
CITY SUPERINTENDENTS OR PRINCIPALS.

Name of corporation.	Population 1905.	Name of superintendent or principal.	Salary of superintendent or principal.	Months in year.	Years in course.	Enumeration September 1905.	Enrollment year 1904-1905.	Average attendance year 1904-1905.	High school graduates.	Non-resident pupils and tuition.	Assistant teachers.
									Enrollment.	Amount received.	Average monthly salary.
									Number.	Number.	
Ackley.....	1491	W. H. Lancelot.....	\$1,100	9	13	478	890	805	50	8	\$ 8.63
Adair.....	961	Will J. Gastell.....	900	9	13	283	373	225	45	7	\$13.60
Adel.....	838	J. W. Graham.....	1,100	9	13	416	277	201	95	10	\$22.75
Afion.....	1085	O. E. Klugaman.....	900	9	12	850	.....	218	4	32	\$30.50
Agency.....	580	C. F. Gentry.....	700	8.5	13	213	206	180	42	8	\$1.90
Ainsworth.....	431	Raymond Dix.....	638	8.5	11	191	163	137	50	11	\$28.78
Akron.....	1350	O. J. Smith.....	720	9	13	416	539	247	31	14	\$147.90
Albert City.....	302	Trace A. Lewis.....	450	9	8	68	49	84	25	1	\$9.00
Albion.....	424	J. H. Dutton.....	700	9	11	214	201	178	45	7	\$7.76
Alden.....	775	Louise V. Taylor.....	729	9	13	867	233	192	53	9	\$497.00
Allerton.....	403	J. F. Holaday.....	1,200	9	13	264	816	804	135	37	\$1,006.50
Allison.....	533	E. Waters.....	600	9	12	162	159	121	33	6	\$198.50
Alta.....	46	Willis J. Bell.....	845	9	13	299	219	205	44	19	\$179.40
Alton.....	1113	F. E. Faller.....	724	9	12	460	173	137	17	5	\$6.45
Altoona.....	50	W. E. Reel.....	540	9	13	123	124	90	13	8	\$91.91
Alvord.....	371	Lily I. Laughlin.....	540	9	9	113	103	71	34	2	\$180.00
Andrew.....	130	Gus Delaney.....	535	9	10	91	151	79	34	2	\$247.45
Ani-a.....	975	W. H. Cheneck.....	900	9	12	878	267	238	34	7	\$247.45
Ankney.....	310	O. S. McCrelght.....	845	9	10	114	115	28	8	12	\$123.50
Anthony.....	609	Paul J. Scarborough.....	810	9	12	212	187	73	37	5	\$234.05
Applag'oa.....	411	A. O. Vochler.....	675	9	11	134	118	100	20	2	\$197.50
Arcadia.....	442	O. M. Williams.....	675	9	11	235	76	20	14	8	\$32.67
Arlington.....	58	Jay L. Rawson.....	768	9	12	275	241	190	43	11	\$255.00
Armstrong.....	729	A. R. Harrave.....	810	9	11	877	279	255	45	8	\$130.00
Arnolds' Park.....	234	H. W. Herrick.....	480	8	9	73	65	23	3	2	\$1.45
Arthur.....	142	.....	.....	9	.....	93	102	84	.....	.....	.....
Ashton.....	534	J. L. Shearer.....	630	9	11	241	73	55	33	10	\$78.00
Auburn.....	414	Wm. Weidt.....	495	9	10	145	140	114	23	8	\$84.51
Aurelia.....	614	Chas. D. Ourtis.....	720	9	11	216	133	181	42	12	\$84.50
Aurora.....	114	Lucy B. Francis.....	460	9	10	130	101	77	35	5	\$81.33
Ayr-hire.....	43	Della Gregg.....	450	9	10	143	106	67	41	5	.....
Bakley.....	315	E. E. Frankia.....	545	9	11	137	110	95	38	5	\$245.00
Baldwin.....	24	J. S. Welch.....	720	9	10	119	112	86	19	9	\$74.00
Bancroft.....	419	Sid J. Backus.....	900	9	11	407	146	118	37	15	.....
Baraam.....	15	J. P. Flynn.....	600	10	8	45	46	33	30	.....	\$292.00
Barnes.....	278	J. H. Atkinson.....	640	9	12	147	91	98	23	11	\$9.55
Batavia.....	523	W. C. Kennedy.....	480	8	11	171	132	160	49	4	\$90.00
Battle Creek.....	510	W. B. Munson.....	720	9	13	193	160	136	45	7	\$87.75
Baxter.....	520	W. E. Rorabaugh.....	600	9	11	148	167	91	23	1	.....
Bayard.....	435	F. J. Mertz.....	720	9	12	201	135	55	40	39	\$164.50
Beacon.....	675	J. P. McMurray.....	680	9	10	811	170	171	30	10	\$50.77
Beaman.....	27	F. E. Stahl.....	540	9	10	72	108	54	14	2	\$87.73
Belmont.....	1213	Frank Poplam.....	1,300	9	12	841	835	246	90	12	\$194.93
Bennett.....	251	Mike M. Ries.....	540	9	9	87	46	41	24	8	\$3.76
Birmingham.....	551	F. S. Hill.....	530	8	13	130	149	148	96	4	\$189.61
Blatsburg.....	155	S. A. Galles.....	675	9	12	130	78	53	36	14	\$63.80
Blairtown.....	540	R. A. Palmer.....	810	9	12	210	163	112	45	6	\$135.00
Blanchard.....	450	Richard Zeidler.....	675	9	11	188	187	120	37	6	\$399.43
Bleasoe.....	253	J. O. Atkinson.....	535	9	9	160	97	77	18	3	\$31.01
Blockton.....	244	Ellas Johnson.....	720	9	12	208	200	178	49	2	\$180.75
Bole.....	435	Albert C. Anderson.....	530	8	10	177	114	85	4	2	.....
Bonaparte.....	264	J. H. Voss.....	810	8	12	237	187	143	40	16	\$147.37
Boudurant.....	247	Mabel Hoffman.....	535	9	9	114	69	68	.....	3	\$6.00
Boyden.....	812	C. G. Ames.....	495	9	11	133	96	89	30	7	\$93.50
Bradyville.....	328	B. F. Westcott.....	540	9	10	111	94	79	28	2	\$15.00

## GRADED SCHOOL STATISTICS—CONTINUED.

Name of corporation.	Population 1906.	Name of superintendent or principal.	Salary of superintendent or principal.	Months in year.	Years in course.	Examination September 1905.	Enrollment year 1904-1905.	Average attendance year 1904-1905.	High school.	Non-resident pupils and tuition.	Assistant teachers.		
									Enrollment. Graduates.	Number.	Amount received.	Number.	Average monthly salary.
Brandon.....	193	E. G. Lockhart.....	370	8.5	9	87	72	50	5	1	7.85	1	40.00
Bridgewater.....		Chas. E. Geesaman.....	540	9	9	123	127	102	29	7	74.70	2	35.00
Brighton.....	889	J. O. McGlade.....	675	9	12	240	247	190	86	734	856.19	8	46.00
Britt.....	1410	B. W. Hadley.....	1200	9	18	438	393	308	53	1217	149.15	12	41.18
Bristow.....	818	F. E. Whitney.....	540	9	13	125	80	93	11	17	169.78	8	38.84
Brooklyn.....	1307	Eugene Henley.....	1290	9	18	461	239	270	96	1787	418.50	9	30.00
Brook.....		Clara Taylor.....	400	8	10		91		34	7	77.50	2	30.00
Buckeye.....	122	L. P. Manning.....	504	9	9	58	47	82		6	14.50	1	40.00
Buffalo.....	317	U. K. Claypool.....	540	9	9	184	153	106		1818	74.01	2	37.50
Buffalo Center.....	701	F. O. Smith.....	750	9	18	408	285	245	56	8	30.00	1	38.20
Burt.....	522	Albert S. Murray.....	675	9	11	142	145	119	44	1831	308.10	4	47.50
Celamus.....	272	H. G. Games.....	570	9.5	9	111	81	65	12	4	28.5	2	37.50
Celmar.....	932	Gertrude Kaye.....	808	9.5	11	316	193	142	59	710	102.62	4	44.00
Caledonia.....		A. O. Green.....	450	9	10	77	88	45	2	1		1	35.00
California.....		Elizabeth Oulthard.....	480	9	10		73			6			35.00
Camanche.....	584	E. Ella Lukens.....	495	9	9	174	158	104	6	6	49.50	3	35.00
Cambridge.....	845	H. W. Dana.....	618	9	12	228	247	194	82	711	84.00	6	50.00
Camarillo.....	413	Vironda M. Converse.....	430	8	12	90	107	29	81	434	158.94	2	35.00
Carbo.....	322	J. H. Stecklter.....	400	8	10		158		49	8	54.50	2	35.00
Carlisle.....	517	H. B. Morgan.....	540	9	12	248	183	185	39	8	90.00	5	33.00
Carsen.....	577	Gay P. Littleville.....	810	9	12	237	224	184	55	837	233.75	4	45.00
Cascade.....	1314	O. L. Newcum.....	500	9	12	190	65	49				2	45.00
Cassey.....	603	J. O. Huntley.....	785	9	12	220	210	161	37	712	200.00	5	42.00
Castana.....	407	W. E. Atkinson.....	1000	9	11	143	124	111	41	860	1,370.00	9	43.33
Center Junction.....	214	W. W. Crawford.....	585	9	10	95	78	66	26	8	31.33	2	37.50
Center Point.....	833	L. D. Curtis.....	670	9	12	193	183	162	4	14	153.40	5	38.00
Central City.....	607	H. H. Taylor.....	780	9	12	214	116	123	52	629	454.50	6	35.88
Charlotte.....	359	Louis Prunberg.....	600	10	9	156	120	99	11	11	5	2	40.50
Charter Oak.....	785	W. S. Mitchell.....	950	9.5	12	322	236	190	80	3	87.50	4	41.00
Chapin.....		Maud Scott.....	498	9	9	80	80				96.50	1	40.00
Chilesa.....	509	H. M. Tiffany.....	540	9	11	181	127	91	24	6	59.75	3	36.66
Churdan.....	518	Tillman Smith.....	675	9	11	184	175	141	59	716	197.28	4	41.25
Cincinnati.....	1232	P. B. Woods.....	980	8.5	12	409	381	294	81	10	120.00	6	31.33
Circleville.....	623	F. B. Stewart.....	880	9	12	155	134	141	36	418	85.00	4	50.00
Clearfield.....	957	J. O. Briggs.....	720	9	12	220	214	151	44	430	285.40	6	41.66
Cleghorn.....	627	J. D. Cherryholmes.....	720	9	12	235	265	190	75	10	454.07	6	46.16
Clermont.....	164	Earle S. Smith.....	540	9	9	82	76	6	4	1	14.95	1	51.00
Coggon.....	505	T. E. Heekel.....	675	9	12	277	161	130	84	8	120.25	3	49.00
Cogan.....	506	W. L. Gater.....	540	9	10	184	154	101	34	13	392.00	3	39.67
Coleman.....	546	E. A. Woodrow.....	680	9	11	204	200	180	58	15	183.07	4	39.88
Colesburg.....	226	C. E. Laraway.....	540	9	9	91	60	52	26	2		1	40.00
College Springs.....	540	A. H. Warhart.....	540	9	9	209	192	104	25	9	34.00	3	41.33
Collins.....		O. Baker.....	630	9	11	185	152	117	17	16	91.00	4	51.25
Colo.....		O. M. Morrison.....	630	9	12	169	149	123	22		119.00	4	51.25
Columbus City.....	423	R. B. Hunt.....	550	8	12	137	110	88	21	611	107.84	4	46.75
Columbus Jct.....	1127	M. C. Ornoch.....	900	9	12	404	325	276	79	167	528.94	9	46.83
Conrad.....	630	A. M. Gray.....	720	9	12	194	136	159	48	722	310.80	5	44.00
Conway.....	318	W. R. Woodruff.....	435	8	11	133		84	29	81	119.64	3	36.66
Coom Rapids.....	1087	O. F. Schell.....	900	9	12	407	339	290	50	819	299.78	10	43.70
Correctionville.....	936	E. B. Thomas.....	900	9	12	501	316	318	62	16	100.00	9	43.27
Cornwith.....	531	J. B. Barge.....	900	9	12	176	204	153	41	419	153.35	5	45.67
Crawfordsville.....	286	Albert Graham.....	630	9	12	135	144	120	22	14	590.78	3	45.83
Cromwell.....	219	Alfred Peterson.....	640	9	9	11	96	71				1	40.00
Cumberland.....	617	Frank Lindeman.....	730	9	11	242	193	165	49	5		1	35.00
Cushing.....	235	Nellie A. Wells.....	550	9	11	96	96	61	81	13	130.27	4	49.06
Dakota City.....	337	L. B. Bravinder.....	630	9	10	196	118	85	32	3			
Dallas Center.....	741	W. H. Gemmill.....	1109	9	12	801	390	209	77	634	330.00	8	45.91
Dauberry.....	553	F. H. Stein.....	850	9	12	441	211	226	4	5	8		48.11
Deale City.....	559	J. W. Long.....	560	8	11	245	203	178	51	111	238.00	5	36.00

## GRADED SCHOOL STATISTICS—CONTINUED.

Name of corporation.	Population 1905.	Name of superintendent or principal.	Salary of superintendent or principal.	Months in year.	Years in course.	Enumeration September 1905.	Enrollment year 1904-1905.	Average attendance year 1904-1905.	High school, (graduates)	Non-resident pupils and tuition.	Assistant teachers.		
									Enrollment, Number.	Amount received.	Number, Average monthly salary.		
Dayton.....	742	Anna B. Black.....	690	9	12	244	228	180	46	7 13	164.50	5	42.00
Decatur.....	828	J. M. Howell.....	540	9	11	156	155	92	42	.....	.....	5	52.50
Dedham.....	976	J. H. Norris.....	540	9	11	151	137	109	25	6 12	91.00	4	40.00
Deep River.....	448	M. T. Morgan.....	810	9	11	210	171	173	32	4 4	164.52	3	40.00
Defiance.....	332	Anna Johnson.....	600	9	10	184	140	112	28	5 25	.....	2	45.00
Delaware.....	.....	Daisy B. LeMaster..	450	9	11	115	98	64	24	3 8	88.25	2	55.00
Delhi.....	.....	J. C. McGee.....	675	9	11	162	123	89	14	1 6	96.37	2	55.00
Delmar.....	524	D. A. Lewis.....	540	9	10	233	141	210	12	3 4	20.50	2	26.67
Delta.....	675	Clyde Workman.....	540	9	14	282	234	169	37	7 11	90.10	6	56.65
Denver.....	168	Lillian Clarke.....	390	9	9	120	85	52	9	.....	.....	7	40.00
De Sota.....	342	B. M. Cobb.....	675	9	11	166	132	104	27	5 23	118.84	8	42.59
Dewey.....	.....	G. H. Getty.....	420	8	10	51	48	17	21	2	5.00	1	40.00
Dexter.....	804	E. L. Smith.....	810	9	12	221	196	174	48	6 53	520.75	7	46.50
Diagonal.....	469	L. M. Burgess.....	585	9	10	188	166	.....	30	.....	.....	5	41.65
Dickens.....	.....	Will Flint.....	585	9	10	98	115	75	17	10	76.00	3	40.00
Dolliver.....	126	Blanche Miles.....	675	9	10	.....	71	.....	9	.....	.....	1	40.00
Doon.....	563	B. F. Youll.....	810	9	12	263	178	194	35	0 16	211.50	4	47.50
Dow City.....	541	H. D. Kies.....	810	9	12	177	229	189	69	5 58	297.50	5	52.00
Dows.....	904	W. H. Blakely.....	900	9	12	227	294	245	62	6 21	471.50	7	46.45
Dumont.....	593	Alice Swope.....	585	9	11	260	181	134	1	.....	5.50	8	40.83
Duncombe.....	427	I. C. Lovejoy.....	540	9	10	146	114	91	16	.....	28.75	8	37.50
Dunlap.....	.....	George Galloway.....	1,000	9	12	634	442	32	54	8 17	281.00	12	46.25
Durant.....	609	L. V. Brantlen.....	690	9	11	194	155	103	41	4 5	51.50	7	46.25
Dyersville.....	1440	W. L. Evans.....	700	10	13	648	83	54	16	8	.....	3	51.67
Dysart.....	884	W. G. Martin.....	810	8	12	273	237	185	47	1 16	146.80	6	47.45
Earlham.....	827	W. H. Monroe.....	1,100	9	12	299	328	235	14	20 73	1,088.00	6	47.50
Early.....	552	F. L. Kolb.....	720	9	12	215	169	141	35	2 16	188.00	3	45.00
Earlville.....	571	W. H. Hazzard.....	620	9	12	184	172	165	40	12 15	200.50	3	40.00
East Peru.....	281	Kathryn Carman.....	450	9	9	102	67	42	2	8	.....	2	35.00
Eddyville.....	1127	L. P. Breeden.....	810	9	12	348	381	255	69	9 39	469.25	6	48.33
Eggenwood.....	538	R. M. Wallace.....	690	9	12	88	127	145	87	5 11	100.80	5	37.00
Elberon.....	398	F. S. Patrick.....	450	9	9	125	88	87	17	5 2	20.00	2	37.50
Elgin.....	609	J. H. Williams.....	675	9	12	215	186	129	36	2 5	49.75	3	38.33
Elkader.....	1254	Robert Rienow.....	1000	9	12	427	271	210	74	12 15	218.50	6	48.33
Elkhora.....	.....	Magorae Peterson.....	690	9	10	140	100	60	20	4 6	.....	2	40.00
Elkport.....	224	Daniel Costegan.....	540	9	17	195	118	87	46	0 15	44.75	2	40.00
Elliott.....	527	W. B. Gregg.....	720	9	12	180	179	166	46	9 30	144.99	6	46.67
Ellston.....	235	D. D. Carlton.....	540	9	12	.....	120	.....	17	.....	54.00	3	38.33
Ellsworth.....	418	O. S. Von Krog.....	720	9	10	171	186	110	21	8 10	22.00	2	48.89
Ellwood.....	.....	H. R. Bartlett.....	495	9	9	86	62	41	30	8	.....	1	35.00
Elms.....	944	A. R. McCook.....	675	9	13	344	311	219	51	6 17	150.00	6	40.85
Emerson.....	588	J. D. Reed.....	720	9	12	206	188	162	34	7 16	204.63	5	42.50
Epworth.....	571	Anna O'Conner.....	504	10	12	167	124	68	13	6	.....	4	36.00
Essex.....	779	M. H. White.....	690	9	11	252	219	186	86	6 7	99.00	5	44.00
Everly.....	400	F. B. Streece.....	630	9	11	147	120	93	15	2 11	135.20	3	40.00
Exira.....	825	F. A. Nims.....	900	9	12	274	260	184	28	8 12	161.39	6	48.33
Fairbank.....	628	A. R. McQueen.....	185	9	12	226	139	104	24	6 4	25.50	3	41.67
Fairfax.....	.....	Alta Dice.....	450	9	11	.....	75	.....	88	6	.....	2	36.00
Farley.....	504	Mary O. Bourke.....	604	10	12	234	177	138	25	2 14	129.01	4	48.75
Farmersburg.....	197	A. E. Rogers.....	425	9	9	.....	65	.....	.....	.....	.....	1	35.00
Farmington.....	1347	Arthur T. S. Owen	880	8	13	355	373	317	68	12 7	522.25	7	38.50
Farmhamville.....	830	O. E. Hibbs.....	540	9	10	120	122	86	22	11 6	87.90	9	37.50
Farragut.....	541	C. P. Beale.....	900	9	12	117	228	151	38	5 5	490.00	5	49.50
Fayette.....	1108	J. E. Moore.....	1,100	9	12	295	166	147	62	6 1	175.50	4	42.85
Fertile.....	.....	Bella Lardard.....	360	8	10	.....	81	.....	24	.....	35.43	2	45.00
Floyd.....	831	E. A. Sheldon.....	675	9	11	90	105	70	34	11 4	21.00	2	35.00
Fonda.....	1009	C. J. Boyington.....	700	9	12	314	298	240	64	14 23	833.50	7	45.83
Fontanelle.....	847	P. P. Sullivan.....	1,000	9	12	292	268	155	40	2 31	218.97	6	40.00

## GRADED SCHOOL STATISTICS—CONTINUED.

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									Enrollment graduate.	Amount received.	Number Average monthly salary.
Ft. Atkinson.....	283	W. A. Daakam.....	495 9	9	182	64	34	34	1	30.00	1
Fraser.....	1243	J. R. Curry.....	500 9	9	854	285	292	42	2	37.00	5
Fredericksburg.....	480	F. A. Wildman.....	540 9	10	212	129	135	34	0	59.00	3
Fremont.....	528	has, Young.....	560 8	12	175	124	120	48	1	145.00	4
Galt.....		H. W. Sutter.....	540 9	9	81	86	53	6	6	7.50	1
Galva.....	399	F. L. Renshaw.....	720 9	12	194	192	145	40	3	247.00	6
Garden Grove.....	630	A. L. Lyon.....	810 9	12	180	232	165	68	8	216.75	6
Garden Hill.....		E. Rittgers.....	630 9	10	218			4	1		5
Garnaville.....		W. E. Lockridge.....	585 9	10	127	94	72	31	10	185.00	2
Garner.....	1260	W. J. Jerome.....	1000 9	12	421	349	269	74	12	249.13	9
Garrison.....	504	Ira J. McGinty.....	765 9	12	202	171	109	13	2		3
Garwin.....	44	W. A. Pye.....	630 9	11	188	123	106	31	6	60.00	9
Geneva.....	194	L. R. Ashline.....	495 9	10	64	55	49	8	3		1
George.....	463	E. T. Gilman.....	630 9	11	146	118	106	16	2	91.75	3
Germania.....	311	Nellie Gallagan.....	540 9	10	174	68	125	27	3		2
Gibson.....		C. W. Moore.....	560 8	10	85		19	8	22		2
Gilman.....	504	D. A. Thdale.....	630 9	11	184	173	137	39	3	310.00	4
Gilmore City.....	679	D. A. Wilson.....	675 9	11	145	241	191	49	3	877.00	4
Gladbrook.....	84	H. E. Shoemaker.....	810 9	12	331	241	217	43	1	289.90	5
Gidden.....	818	E. D. Gepson.....	1000 9	12	266	236	106	76	12	711.00	8
Goldfield.....	576	O. H. Benson.....	800 9	12	255	250	108	51	5	198.00	7
Goodell.....	245	Carl Williams.....	525 9	10	111	102	80	34	5	47.85	2
Gowrie.....	767	C. E. Covett.....	675 9	12	258	206	146	47	8	80.00	6
Graettinger.....	478	F. H. Dawson.....	495 9	10	202	187	124	36	5	27.00	4
Grand Junction.....	1058	F. K. Amle.....	900 9	12	893	240	216	65	18	238.00	4
Grand Mount.....	408	Lawrence Baker.....	585 9	9	141	108	88	4	2		3
Grand River.....	354	H. L. Coeher.....	480 8	11	136	168	99	54	3	88.00	1
Grant.....		Thos. Dunn.....	630 9	10	67		2	7	11	97.73	3
Granville.....	346	R. M. Lampman.....	650 10	10	158	21	31	4	2	10.10	1
Gravity.....	559	W. H. Cash.....	575 9	10	161	173	120	42	6	155.50	3
Gray.....	191	Beile Lancelot.....	540 9	10	67	87	61	33	6	113.50	2
Greely (Ba'h'n'to).....	416	Anna Loloney.....	405 9	10	197	172	106	37	4	80.75	3
Greeley (Del. Co).....		W. E. Moss.....	630 9	11	130	151	79	14	1	185.00	3
Greene.....	1224	W. W. Overmyer.....	1000 9	12	334	250	271	71	8	473.37	8
Greenfield.....	1445	W. R. Andrews.....	1200 9	12	414	341	334	69	9	230.00	11
Grimes.....	858	R. L. Beger.....	520 8	10	199	167	120	17	3	2.25	3
Griswold.....	992	D. C. Neifert.....	1000 9	13	263	250	218	53	4	463.15	6
Grundy Center.....	1379	O. L. Love.....	1000 9	13	442	395	309	125	25	401.75	12
Guernsey.....		Wilber A Service.....	850 7	10	73	76	57	25	7	23.60	1
Guthrie Center.....	1424	C. V. Williams.....	900 9	12	432	384	323	73	10	194.64	10
Hancock.....	288	W. Lyman.....	585 9	10	106	99	69	17		127.15	1
Harcourt.....	28										2
Hardy.....		Francis Hubbard.....	45 9	10	76	49	38	6			1
Harpers Ferry.....	280										1
Harris.....	335	G. E. Shaver.....	810 9	11	68			9	1		1
Hartley.....	1015	D. M. Odle.....	1000 9	12	489	349	302	72	14	322.02	10
Hartwick.....		L. J. White.....	810 9	10	57	56	54	22	1		1
Hastings.....	417	A. E. Tipple.....	630 9	12	182	128	91	14	3	15.75	8
Havelock.....	314	B. H. Culver.....	675 9	12	116	87	84	22	9	4.62	8
Hawkeye.....	585	E. O. Preston.....	715 9.5	12	250	165	115	34	6	40.50	8
Hayesville.....		Elizabeth Thomas.....	390 8	10	56				1		1
Hedrick.....	1009	Mary W. Bryant.....	600 8	12	308	241	287	45	8	129.29	6
Henderson.....	307	R. E. Davenport.....	650 9	11	90	89	68	26	5		3
Hesper.....		J. P. Street.....	585 9	9	97	87	78	34	1	29.22	2
Hilldale.....	239	H. P. Mowrer.....	450 9	10	107	96	68	26			2
Holstein.....	508	R. A. Griffin.....	950 9	13	348	260	213	40	6	224.90	8
Hopkinton.....	316	E. G. Meisner.....	635 9	11	253	237	148	29	1	9.15	4
Hornick.....	269	W. H. Shipley.....	540 8.5	11	134	106	91	28	17	239.00	8

## GRADED SCHOOL STATISTICS—CONTINUED.

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									Number.	Amount received.	Number.	Average monthly salary.
Hesper.	596	J. G. Honnold.	600	10	9	202	95	87	29			44.25
Hubbard.	591	W. O. Reed.	774	9	18	212	169	120	31	89.28		45.50
Hill.	788	T. T. Nye.	900	9	12	321	242	201	47			52.71
Hammonton.	888	W. F. Kelso.	945	9	12	857	802	228	68	274.50		45.00
Imogene.	28	J. B. Woodrum.	517	9	9	192	98	84				42.50
Iowa.	618	B. L. Bankers.	675	9	11	193	183	161	47	214.50		46.25
Ionis.	318	Walter P. Johns.	545	9	12	160	125	88	34	15.00		40.00
Ireton.	592	A. L. Halstead.	675	9	11	229	145	127	81	203.50		50.00
Irwia.	315	James Seymour.	535	9	10	131	115	108	18			45.00
Jamieson.	413	J. E. Kinney.	510	9	10	154	130	110		85.10		45.00
Janesville.	299	V. G. Behrens.	430	9	9	85	81	69	8	70.25		41.00
Jasp.	630	T. A. Walters.	720	9	12	306	190	127	27	100.80		40.00
Jewell.	933	A. R. Gardiner.	720	9	12	242	235	176	51			42.00
Jolley.	235	H. A. Crawford.	510	9	10	105	83	65	22			35.00
Kalona.	516	H. C. Kibe.	630	9	12	203	158	130	29	115.60		37.50
Kanawha.	29	C. A. Pillsbury.	765	9	12	116	120	83	43	88.00		41.00
Kellerton.	592	H. L. Linton.	635	8.5	12		191	55	3	193.18		40.00
Kelllogg.	692	F. M. Phillips.	730	9	12	186	154	118	32	61.00		37.50
Kensett.	435	A. L. Burgoon.	558	8.5	10	159	138	91	5	49.87		30.00
Kent.	161	James S. Francis.	540	9	9	75	78	46				40.00
Keawood Park.	316	Marie Thanner.	510	9	10	209	178	116	12			37.13
Kewanqua.	114	David Williams.	1009	8	12	333	360	275	8	612.62		19.00
Kiota.	1034	C. W. Yeager.	765	9	12	270	254	212	72	431.20		40.00
Klawick.		Frank Shultz.	600	8	11		142		31	140.00		41.25
Kyatone.	359	J. H. Rozema.	731	10	10	188	95	83	29	116.00		45.00
Kingsley.	837	W. A. Burton.	720	9	12	302	238	192	51	297.00		41.84
Kiaross.	161	Harry P. Trumbo.	540	9	10	60	51	49	10	68.00		40.00
Kirkman.	212	W. J. Luxford.	535	9	10	92	111	88	11	68.90		40.00
Kirkville.	324	C. H. Thomas.	440	8	10	158	122	101	28	59.00		35.00
Klemms.	292	T. D. Haughton.	450	9	10	131	135	47	18			41.00
Klerim.		Ira Craigmile.	450	9	10	107	77	54	24	61.80		40.00
Knoxilton.	273	Frank S. Willey.	390	8	10		97		29	32.21		32.50
Lacoma.	519	George O. Eaton.	630	9	12	176	215	157	69	219.74		38.75
Ladara.	214	W. S. Mason.	630	9	11	126	105	88	31	190.00		44.00
Lake Mills.	1315	W. H. Whitford.	810	9	12	495	424	310	61	91.50		41.87
Lake Park.	614	M. R. Hassell.	765	9	12		215		41	66.00		40.83
Lake View.	435	John B. Blacke.	720	9	11	180	132	124	44	99.85		33.75
Lambert.	548	P. O. Avidson.	675	9	11	219	205	172	51	73.00		36.33
Lanotte.	291	Emma O. Ahlers.	450	9	10	143	129	82	25	85.00		41.66
Laporte City.	1347	L. H. Minkel.	1010	9	11	417	329	259	81	310.00		43.00
Larchwood.	424	D. B. Mericle.	745	9	11	161	154	128	29	117.50		46.67
Larabee.	117	Ernest Ackerman.	510	9	8	71	82	53	6	85.25		43.00
Lattimer.	293	G. H. Washburn.	480	9	11	150	117	80	24	6.75		40.00
Laurens.	743	W. H. Reeve.	850	9	12	290	231	239	61	453.00		45.83
Lawler.	637	Daniel Costigan.	718	9	11	374	107	114	26			35.33
LeClaire.	772	A. J. Newmann.	720	9	12	179	141	110	17	27.50		41.94
LeGrand.	312	J. B. Adair.	495	9	11	116	78	67	27			40.00
Lehigh.	937	E. E. Cavanaugh.	630	9	11	434	258	278	25	11.00		31.15
Leland.	211	Joseph Bowman.	810	8	10	110	89	45	44			31.00
Lenox.		E. S. Kuhn.	1000	9	12	369	243	232	66	175.00		44.33
LeRoy.	193	A. J. Mitchell.	330	8	9	73	60	47	21			35.00
Lester.		L. A. Bailey.	510	9	9	105	92	70	15	103.00		43.00
Lettsa.	410	C. E. Moffit.	630	9	11	137	121	80	41	150.00		40.00
Lewis.	515	A. D. Kling.	809	9	12	234	235	145	53	281.53		42.50
Libertyville.		H. F. Young.	450	9	11	96	91	73	19			35.00
Lima Springs.	436	F. A. Welch.	720	9	12	211	134	162	55	346.00		40.00
Linden.	319	J. F. Barrows.	675	9	11	143	117	92	35	263.40		40.00
Litaville.	813	O. H. Hollen.	920	9	11	214	217	167	70	820.00		45.00

## GRADED SCHOOL STATISTICS—CONTINUED.

Name of corporation.	Population 1905.	Name of superintendent or principal.	Salary of superintendent or principal.	Months in year.	Years in course.	Enumeration September 1905.	Enrollment year 1904-1905.	Average attendance 1904-1905.	High school.	Non-resident pupils and tuition.	Assist teachers.
									Enrollment.	Amount received.	Average monthly salary.
									Graduates.	Number.	
Linn Grove		J. P. Lenning.	600	9	11	171	257	114	45	7	40.00
Lisbon	948	P. W. Peterson.	1000	9	13	269	208	168	55	10	45.00
Liscomb	356	M. M. McFee.	595	8	11	150	128	102	82	9	45.00
Little Cedar		C. W. Covitt.	578	8	12						33.25
Little Rock	382	J. E. Troth.	675	9	11	117	107	82	21	7	48.83
Little Sioux	427	E. D. Leonard	585	9	12	148	141	108	19	10	86.86
Livemore	599	J. A. Echenrod	675	9	12	200	181	146	53	8	45.00
Logan	1379	E. E. Blodgett	1200	9	11	448	397	361	76	10	47.00
Lohrville	628	W. L. McDiamid.	750	9	11	189	109	155	45	11	48.75
Lone Tree		Amos Hoffman.	675	9	11	187	168	139	29	6	41.25
Lorimer	722	M. I. Roberts.	724	9	11	207	156	146	29	8	41.00
Lost Nation	507	G. E. Farley	730	9	10	203	138	138	36	19	41.66
Lovilia	478	C. E. Evans.	480	8	10	200	146	97	28	1	35.00
Lowden	612	B. S. Longbeam.	600	9	10	236	149	116	1	11	40.00
Lucas	1198	George Miller.	675	9	12	460	404	300	84	10	55.14
Lu Verne	552	Ward Hanna.	630	9	11	280	168	148	87	9	43.75
Lynneville	468	A. T. Gifford.	630	9	11		160		24	12	32.50
Macedonia	355	H. L. Caullet.	720	9	11	136	161	125	44	15	44.88
Macksburg	238	Mary Stanley.	540	8	10		74		8		32.50
Magnolia	221	F. F. Storer	540	9	10	124	118	56	51	12	40.00
Malcom	427	S. H. Wood	810	9	12	182	95	18	47	18	47.72
Maloy	146	Iola Hartley.	320	8	9		50		32	8	30.00
Malvern	1206	O. P. Stewart.	900	9	12	411	217	262	57	18	48.75
Madrid	1078	E. L. Meek.	765	9	11	812	234	207	52	11	44.70
Manilla	795	J. C. Richter.	810	9	12	384	255	243	44	6	45.67
Mansley	387	S. G. Clemmer.	495	9	10	126	95	83	24	7	40.00
Manning	1382	C. J. Johnson.	1100	9	12	350	454	361	76	42	51.67
Manson	1305	G. W. Young.	1100	9	11	261	429	325	71	10	47.00
Mapleton	1184	T. V. Bird.	900	9	12	403	330	268	60	15	48.00
Marathon	526	E. J. Fneling.	800	9	12	373	290	228	54	6	36.66
Marble Rock	532	L. E. Hickelburg.	765	9	11		186		62	17	32.00
Mareus	832	R. A. Fenton.	720	9	12	278	132	138	66	17	45.00
Marne	875	J. J. Lynch.	630	9	11	118	137	91	32	21	42.50
Martinsburg	282	Maud Hursey.	480	8	10	109	107	77	41	15	37.50
Massena	486	H. B. Heitzler.	675	9	11	176	146	101	38	4	42.00
Maurice	254	A. Van Wechel.	495	9	11	72	67	48	6	4	40.00
Maxwell	881	Charles Kies.	720	9	12	322	268	176	39	7	50.83
Maynard	470	A. B. Ward.	540	9	11	173	141	120	26	5	40.00
Mcallsburg	306	C. M. Lotten.	540	9	11	187	189	80	24	6	60.00
McIntyre	539	E. M. Fox.	585	9	12	196	155	106	28	8	50.00
McGregor	1431	Josephine Harrison	1093	9	12	427	399	326	80	19	56.66
Mechanicville	754	G. H. Scobey.	900	9	11	205	242	190	67	10	45.00
Medapolis	857	T. M. Clevenger.	810	9	11	258	247	192			45.00
Melbourne	344	A. G. Brown.	585	9	11	185	188	95	30	4	41.00
Menlo	398	James Lowrey.	720	9	11	169	132	101	16	8	45.00
Merriden	456	W. O. Dailey.	630	9	10	177	118	79	8	3	45.00
Merrill	438	R. F. Scott.	675	9	9	180	142	112	4		45.00
Messervy	234	Mrs. E. W. Russell	450	9	10	56	92				25.50
Miles	326	W. J. Hunt.	730	9	10	185	114	90	48	11	40.00
Millford	564	F. T. Thompkins.	720	9	11	212	187	142	43	9	43.00
Millersburg		A. J. Wolcott.	480	8	9	64	79	59	37	3	37.50
Millo	597	P. M. Hersom.	810	9	12	188	196	148	65	4	44.00
Milton	1107	Frank Jarvis.	900	8	13	318	241	220	80	14	59.00
Minburn	886	E. R. Monroe.	675	9	11	171	152	128	34	7	41.66
Minden	405	Ernest Walker.	675	9	11	208	116	118	7	3	41.25
Mitchell	258	Carl J. Knock.	675	9	11	146	181	108	22	3	35.00
Mitchellville	755	Ernest Coad.	720	9	12	229	23	178	66	32	41.00
Medale	458	Susie T. Faith.	495	9	10	120	99	107	52	6	45.00
Mondamin	398	Geo. E. Misaldine.	675	9	10	108	146	108	81	8	50.00

## GRADED SCHOOL STATISTICS—CONTINUED.

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									Enrollment.	Amount received.	Average monthly salary.
Monmouth	291	E. R. Stoddard	535	9	10	107	132	109	87	5	33.33
Monrovia	836	J. S. Dood	765	9	11	234	151	150	52	28	45.00
Monroe	836	C. T. Reel	720	9	11	215	181	163	45	9	42.00
Montezuma	1234	C. E. Douglas	1300	9	12	503	283	335	96	16	51.83
Montour	445	Viola Ward	630	9	12	125	110	65	28	2	40.00
Montrose	710	J. W. Kennedy	600	8	12	227	157	139	34	5	30.00
Moorhead	254	A. L. Vincent	810	9	11	245	231	168	88	9	40.00
Moravia	694	T. B. Munksburg	600	8	11	248	157	174	18	2	40.00
Morning Sun	941	C. T. Hill	1100	9	13	308	311	265	80	546.00	45.00
Morrison	182	N. B. Kaapp	450	9	11	53	53	53	7	5	40.00
Mt. Union	192	F. W. Roberts	428	9	9	65	78	89	10	1	55.00
Monteion	1225	G. W. Bryan	1100	9	12	445	542	317	24	8	67.00
Morville	551	J. F. Burgess	700	9	11	185	159	132	38	7	45.00
Murray	831	G. E. Wright	900	9	12	257	205	180	66	14	42.00
Nashua	1383	E. O. Hill	1050	9	13	372	345	270	88	12	45.45
Neola	1041	L. D. Shuttleworth	900	9	12	392	184	167	10	1	45.45
Newell	600	J. E. Gandy	810	9	12	241	208	175	64	10	45.45
New Hall	831	E. E. Steadman	495	9	9	92	61	42	29	3	45.00
New Hartford	574	H. E. Ellis	765	9	11	189	163	134	48	7	45.00
New London	1014	N. E. Johnson	765	9	11	288	248	168	10	6	40.00
New Sharon	1234	John McPherson	890	9	12	389	227	290	75	18	40.00
New Virginia	338	E. E. Baker	630	9	10	149	123	148	46	7	38.75
Nodaway	352	H. F. Volkman	675	9	12	136	104	92	17	8	41.66
Nora Springs	1145	E. F. Fisher	1200	9	12	380	384	272	184	25	51.00
North English	835	J. M. McCullon	900	9	12	311	295	218	64	5	40.00
North McGregor	571	Fred A. Beyl	685	9.5	9	235	151	95	18	3	40.00
Northwood	1378	F. W. Edwards	900	9	12	310	361	310	75	13	44.02
Northboro	205	W. O. Boylan	513	9	10	101	91	90	29	7	36.67
Norwalk	357	Edward Goetseh	400	9	10	101	102	75	40	8	40.00
Norway	54	George A. Glenny	675	9	11	215	56	87	31	8	40.00
Oakland	933	E. R. Jackson	675	9	11	452	345	275	62	12	46.31
Ocheyedan	697	J. R. Wilson	810	9	11	219	191	180	36	23	50.00
Odebolt	1431	Leslie Reed	1250	9	13	483	399	325	94	12	47.00
Odena	1035	Clare E. Thompson	639	9	11	300	237	247	51	9	40.00
Olga	679	Tom J. Cowan	855	9	12	255	215	187	48	10	43.40
Ollie	278	J. E. Dovelbess	430	7	10	122	103	69	37	6	35.00
Oaslow	274	Hugh Mossman	720	9	11	78	87	70	31	6	40.00
Orehard	450	A. A. Longley	450	9	9	71	75	50	6	5	35.00
Orient	341	P. B. Homaa	675	9	11	148	160	127	34	1	40.00
Oslan	746	C. A. Russell	812	9.5	10	395	110	77	26	7	40.00
Oto	339	W. H. Leyenberger	630	9	11	123	113	132	30	4	33.33
Oxford	647	R. W. Sles	745	9	11	220	187	140	32	7	40.00
Oxford Junction	800	J. M. Fouts	675	9	12	298	228	183	51	7	41.80
Pacific Junction	48	J. Y. Ashton	675	9	11	349	203	152	33	7	40.00
Packwood	601	Frank Stewart	450	9	9	109	79	54	10	7	42.50
Padama	264	J. H. Westcott	540	9	9	140	100	79	16	6	45.00
Parkersburg	1014	O. E. Dixon	1,000	9.5	12	389	304	252	74	9	44.05
Parnell	391	Mark Mullis	630	9	10	180	160	118	15	1	40.00
Paton	331	J. F. Bradshaw	630	9	11	101	140	109	44	9	45.50
Patterson	119	Carl Missetline	405	9	10	122	91	41	10	1	40.00
Paulina	675	E. E. Martin	1,000	9	12	394	249	214	54	12	40.12
Pauline	253	A. A. Giddings	535	9	10	121	125	95	22	6	45.00
Peterson	439	E. G. Clarke	765	9	12	154	174	135	51	8	41.25
Pierson	431	James Daughon	720	9	12	183	185	141	45	7	43.83
Pilot Mound	835	J. B. Jones	500	9	10	116	88	65	16	8	33.33
Plainfield	337	W. H. Gelvin	630	9	11	140	139	109	49	4	35.66
Pleasanton	204	J. E. Cozad	400	8	9	81	92	66	36	8	32.50
Pleasantville	708	J. M. Ireland	640	8	12	243	234	202	65	11	37.00
Plover	.....	Mary H. Hobbs	535	9	11	.....	130	84	8	.....	45.00

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									Enrollment Number.	Amount received.	Number. Average monthly salary.	
Primghar.....	813	H. A. Mitchell.....	1100	9	13	323	278	243	77	13	83	833.00 7 44.50
Princeton.....	432	J. T. Paigham.....	630	9	9	122	108	86	14	14	14	17.00 2 42.50
Palaski.....	355	Arminia B. Nerry..	430	8	10	132	94	83	13	10	8	18.00 3 30.00
Quasqueton.....	416	Auna E. Barrett....	540	9	10	180	111	107	18	6	10	86.62 2 40.00
Quimby.....	540	M. E. Gilbert.....	540	9	11	70	68	60	21	2	2	2.00 .....
Ridcliffe.....	629	C. F. Kaehae.....	765	9	12	816	210	142	55	5	35	249.50 5 40.50
Rake.....	289	Lawrence Severson..	289	7	10	103	67	83	21	1	1	1.00 .....
Randalla.....	119	Alice M. Curtis.....	405	9	10	60	55	28	2	6	7	81.00 1 42.00
Randolph.....	349	Allan Peterson.....	765	9	11	136	216	128	41	30	30	860.00 5 49.00
Reasoner.....	320	Alice Elrod.....	820	8	9	80	80	20	8	8	8	2.00 .....
Redfield.....	659	E. J. Pollock.....	720	9	11	242	227	162	60	7	14	238.75 4 45.00
Redding.....	307	J. W. Wilkerson.....	430	8	9	93	93	30	30	30	30	118.80 2 37.50
Reinbeck.....	1230	J. O. Jamieson.....	900	9	12	298	331	275	79	11	14	174.50 8 47.50
Remsen.....	938	John Hays.....	630	9	11	454	128	101	27	2	8	54.00 4 47.50
Renwick.....	404	R. E. Scott.....	535	9	13	131	143	114	81	7	21	21250 8 46.00
Rhodes.....	436	F. D. Cartwright....	535	9	11	223	182	138	29	11	5	43.75
Riceville.....	823	Paul M. Ray.....	900	9	13	192	254	275	53	9	8	180.39 8 35.00
Richland.....	607	C. W. Hick.....	720	9	10	130	155	110	27	6	10	53.00 3 35.88
Richmond.....	405	W. A. Anten.....	405	9	9	140	54	40	19	1	1	25.55
Ridgeway.....	536	A. A. Nelson.....	540	9	11	111	111	88	8	6	6	11.90 2 30.00
Ringsted.....	312	Alma Cox.....	312	8	10	80	130	51	8	8	8	89.00
Ritsey.....	378	H. A. Glackmeyer....	743	9	12	178	193	124	35	5	32	275.00 3 44.00
Riverside.....	647	E. L. Bryson.....	675	9	12	180	96	85	16	4	9	63.18 3 40.00
Riverton.....	703	C. V. Fraider.....	675	9	11	241	242	165	29	13	24	247.25 4 40.00
Rockford.....	929	S. R. Fitz.....	900	9	11	231	230	220	70	11	33	274.90 8 40.68
Rock Valley.....	1088	E. P. Croaker.....	900	9	13	615	345	230	49	9	8	202.00 9 45.27
Rockwell.....	635	Fred Mahannah.....	675	9	12	202	154	110	83	6	1	15.00 8 35.44
Rockwell City.....	1314	L. O. Bryan.....	1100	9	12	439	334	296	54	6	38	407.50 11 52.23
Rollins.....	131	Homer Riendell.....	310	9	9	91	83	43	24	5	5	40.00 1 35.00
Rodney.....	151	T. M. Gushue.....	450	9	10	78	93	64	24	14	14	60.00 3 37.50
Roland.....	639	Ira Scott.....	639	8	12	272	205	175	38	7	23	267.00 8 49.50
Rolf.....	931	Fred L. Omsedy....	1000	9	12	427	338	337	72	7	19	487.95 13 45.00
Rose Hill.....	311	Frank Souter.....	450	9	10	111	129	94	31	1	1	123.00 8 39.67
Rowan.....	243	A. E. Marley.....	405	9	10	130	133	103	32	3	3	43.00
Royal.....	330	N. Stena Martinson..	330	9	9	74	52	36	3	1	1	40.00
Rudd.....	410	Nellie C. Downs....	337	9	10	107	63	25	23	9	2	27.60 3 31.88
Runnells.....	502	W. J. Bruner.....	360	7	9	156	134	92	7	8	8	37.50
Russell.....	679	J. W. Rowley.....	775	9	12	134	178	135	55	11	25	423.00 5 40.00
Ruthven.....	739	H. A. Welty.....	1000	9	12	274	244	194	62	7	22	34.50 5 43.83
Bray.....	371	Mary Wadlick.....	405	9	10	131	104	19	6	1	1	85.90
Sabula.....	928	Eva M. Fleming.....	810	9	11	323	225	198	44	6	6	88.00 6 49.80
St. Amand.....	714	Frank Sanderlin....	675	9	11	205	170	144	31	4	5	63.50 5 37.00
St. Charles.....	401	A. H. Antoa.....	540	9	13	135	131	117	39	7	39	167.78 8 35.00
Salem.....	531	R. R. Richmond.....	531	8.5	13	149	140	95	5	5	5	43.00
Salix.....	723	LeRoy Anderson.....	723	9	9	84	84	5	5	1	1	2.00
Sandborn.....	370	Joel E. Johnson.....	1000	9	12	443	377	323	40	5	32	113.00 13 48.83
Schaller.....	630	C. W. Rodman.....	675	9	12	152	137	153	42	43	43	219.50 6 47.50
Schleswig.....	183	F. N. O'Leary.....	630	9	10	113	79	77	21	1	0	16.00 2 45.00
Serkenton.....	330	W. J. Ball.....	810	9	11	293	227	178	39	19	18	250.74 6 40.00
Searsboro.....	368	Ernest Tinkle.....	500	9	11	118	92	71	29	10	13	71.71 2 33.00
Sergeant Bluff.....	412	R. H. Srivaster.....	675	9	12	233	171	139	27	6	14	215.00 4 40.00
Shannon City.....	376	O. W. Hiat.....	670	9	11	193	198	100	30	40	40	234.00 3 41.00
Shenell.....	613	J. F. Dozier.....	735	9	11	212	139	151	31	11	9	117.00 5 45.45
Shelby.....	649	Benj Boardman.....	810	9	13	219	161	172	64	9	25	55.75 8 50.00
Shell Brook.....	948	J. J. Sharps.....	810	9	13	240	213	138	63	13	33	515.78 9 45.00
Shellsburg.....	563	M. R. Fayram.....	675	9	11	174	151	118	31	11	23	135.90 3 40.00
Shenoyville.....	493	George Sarsah.....	493	8	11	61	61	23	4	1	1	32.50

## GRADED SCHOOL STATISTICS—CONTINUED.

Name of corporation.	Population 1905.	Name of superintendent or principal.	Salary of superintendent or principal.	Months in year.	Years in course.	Enumeration September 1905.	Enrollment year 1904-1905.	Average attendance year 1904-1905.	High school.	Non-resident pupils and tuition.	Assistant teachers.
									Enrollment.	Amount received.	Number.
Sibley	1464	L. B. Parsons	1200	9	13	461	414	321	88	12	28
Sidney	1146	C. S. Cobb	1080	9	13	497	510	407	96	11	62
Silver City	417	J. R. Graham	675	9	11	149	142	139	26	9	18
Sioux Center	841	A. W. Alvoord	850	9	12	319	157	201	26	5	8
Sioux Rapids	917	P. L. Doyland	900	9	12	309	285	214	61	32	32
Slater		W. O. Wydell	720	9	12	149	182	79	25		
Sloan	681	J. E. Vertz	765	9	12	295	253	227	80	10	38
Smithland		C. W. Boys	680	9	11	227	162	155	22	4	11
Solon	402	J. W. Weber	480	8	11	127	152	127	22	5	30
South English	329	Owen Hernsley	560	8	10		100		29	3	6
Spillville	356	Stephen Kruehek	475	9	10	185	49	44	3	7	48
Spirit Lake	1241	B. S. Whitley	1100	9	12	401	369	280	94	7	10
Springdale		C. E. Barton	765	9	12	181	133	108	99	7	29
Springville	384	J. E. Rieke	810	9	12		198		69	10	40
Staceyville	272	Oscar Mueller	675	9	11	322	77	144	5	4	1
Stanhope		F. C. Runkle	540	9	12	128	98	67	6	4	10
Stanton		Charles Hill	595	8	10	254	188	177	89	7	4
Stanwood	447	Paul S. Fifer	810	9	12	181	141	117	32	2	6
State Center		M. D. Sutton	1000	9	11	289	279	230	34	9	25
Steamboat Rock	486	George C. Hoyt	585	9	11	140	117	94	24	3	18
Stony City	116	Julia Hagen	540	9	12	434	360	297	48	8	8
Stratford	621	J. M. Holaday	675	9	12	227	178	128	50	7	12
Strawberry Point	983	J. F. Trotter	900	9	12	204	201	172	31	9	7
Summer	1474	Thos. J. Durant	1100	9	12	514	361	291	67	10	16
Superior	159	F. O. Crowe	450	9	9	68	73	24			18
Sutherland	662	F. E. Tellier	1600	9	12	279	246	229	44	6	38
Swaledale	264	L. B. Silvers	585	9	10	111	62	61	18	8	6
Swega City	378	C. A. Smith	630	9	12	137	122	96	28	1	6
Tabor	958	G. U. Gordon	775	9	11	369	344	263	48	8	17
Thayer		George Abel	800	8	9	88	88	46			
Thompson	431	W. H. Golly	540	9	11	179	180	107	29	6	21
Thornburg	228					84					
Thornton	192	Julius H. Rohde	585	9	11	165	142	109	41	4	14
Thorman	355	H. O. Brown	785	9	11	168	221	180	32	10	48
Tingley	478	Chas. Murray	720	9	11		158		32	8	1
Traer	1407	F. L. Mahannah	1100	9	12	414	364	302	87	11	18
Tripoli	711	R. A. French	680	9	11	175	160	85	16	5	2
Truro	284	Walter Craig	450	9	9	104	102	71	83	26	66
Union	536	A. S. Fulton	720	9	12	214	188	152	53	3	19
Unionville		W. K. Bishop	560	8	10	120	95	74	24	8	7
Ute	490	W. E. Bowen	675	9	11	200	182	182	35	10	14
Vall	676	F. F. Gordon	800	9	11	275	90	98	7	1	10
Van Meter	409	E. L. Douglas	765	9	11	274	143	121	32	6	30
Van Wert	488	F. P. Reed	600	8	11	193	183	83	42	6	18
Victor	722	Walter I. Griffith	675	9	12	319	229	191	64	13	22
Volga	409	W. J. Triglie	630	9	12	163	148	123	34	7	17
Walcott	207	Henry E. Ronge	600	10	11	158	115	76	4	2	21
Walker	571	A. B. Alderman	720	9	11	210	148	141	30	4	8
Wall Lake	619	M. R. Timmerman	810	9	12	229	209	162	48	7	11
Walnut	935	G. O. Van Meter	1050	9	12	383	288	275	60	13	18
Wapello	1693	J. W. McCulloch	1060	9	12	295	404	141	76	8	28
Washta	434	W. E. Kapp	900	9	10	168	145	119	24	6	9
Waucoma	551	A. A. Belknap	540	9	12	214	140	120	39	7	13
Waukeo	340	Will Shirley	540	9	12	148	129	168	36	2	17
Wayland	480	J. W. Piercy	520	8	11	212	160	123			
Webb	166	C. W. Manning	480	9	9	72	64	43		5	25
Weldon	319	A. N. Smith	600	8	11	127	180	99	55	9	
Wellman	668	A. O. Thomas	810	9	12	201	199	155	55	21	20

## GRADED SCHOOL STATISTICS—CONTINUED.

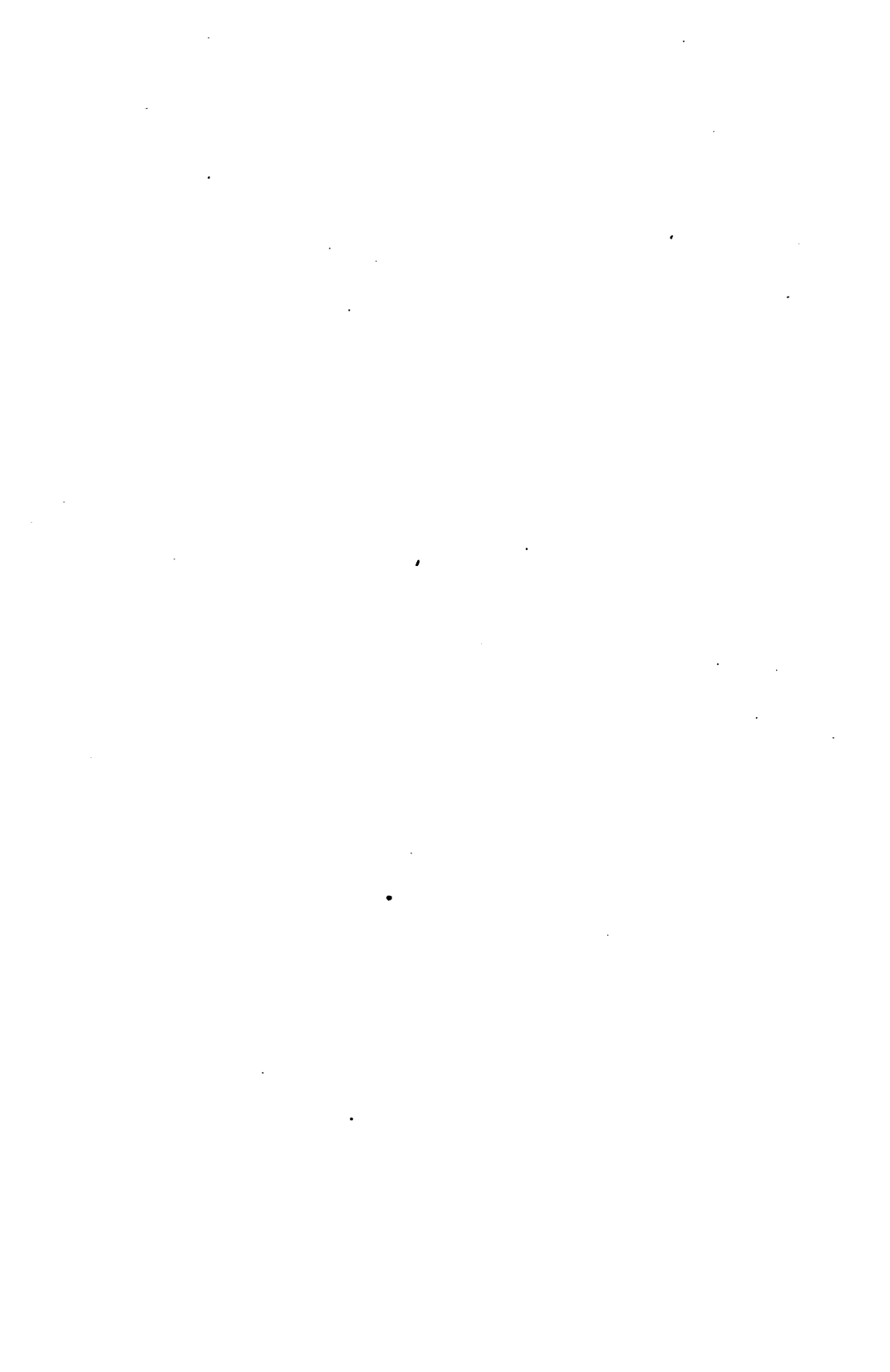
Name of corporation.	Population 1905.	Name of superintendent or principal.	Salary of superintendent or principal.	Months in year.	Years in course.	Enumeration September, 1905.	Enrollment year 1905-1906.	Average attendance year 1904-1905.	High schools.		Non-resident pupils and tuition.	Assistant teachers.
									Enrollment.	Graduates.		
									Number.	Number.	Amount received.	Average monthly salary.
Wesley.....	532	M. H. Hoffman...	675	9	11	222	133	26	9	110	\$ 37.00	4 \$46.25
West Bend.....	691	G. D. Clevenger...	650	9	12	260	137	135	28	3	32.25	6 41.00
West Branch.....	657	S. H. Mott.....	900	9	12	263	234	196	89	14	571.50	6 40.00
Westchester.....	206	Rose Mintier.....	450	9	9	69	61	42	...	4	23.44	1 40.00
Westgate.....	248	H. P. Smith.....	450	9	9	74	45	48	19	111	99.00	1 40.00
West Side.....	449	E. D. Lewis.....	720	9	11	154	154	248	26	6	68.00	4 46.00
Wheatland.....	514	E. F. Housh.....	810	9	11	205	146	119	81	8	55.00	4 39.25
Whiting.....	617	G. L. Weaver.....	720	9	12	352	173	149	49	515	245.00	6 40.88
Whittemore.....	485	A. O. Joy.....	720	9	11	123	99	60	17	11	...	8 41.25
Williams.....	523	E. E. Bovee.....	700	9	12	192	171	181	55	15	169.00	4 45.00
Williamsburg.....	1026	Bruce Francis.....	1300	9	12	355	363	239	90	15	641.48	8 44.37
Willow Glen.....	...	C. C. Knoll.....	540	9	10	101	97	68	28	8	25.80	2 40.00
Wilton.....	1189	W. H. A. Pre.....	1100	9	12	358	343	260	80	6	382.62	6 45.00
Winfield.....	960	F. G. Robb.....	900	9	12	271	278	229	71	18	332.70	6 47.00
Winthrop.....	607	J. O. Murphy.....	675	9	10	188	184	122	49	10	220.40	8 41.67
Wiota.....	228	M. F. Enebach.....	450	9	10	92	94	64	13	4	89.00	3 37.00
Woden.....	200	...	...	...	...	...	...	...	...	...	...	...
Woodburn.....	437	Mamie Zaelke.....	800	8	10	140	109	80	24	5	8.50	8 40.00
Woodstock.....	258	E. F. Snow.....	540	9	10	81	80	57	11	8	2.25	2 40.00
Woodward.....	620	Anna Boden.....	540	9	10	180	152	124	34	7	20.79	4 37.50
Wyoming.....	808	Syron J. Read.....	810	9	12	230	233	160	67	5	216.46	6 48.00
Zearing.....	479	George Fallor....	630	9	12	...	159	23	4	...	...	5 49.00

## SPECIAL LIBRARY REPORT.

Counties.	Number of volumes in the libraries.	Amount of money expended from district funds for library books.	Amount expended raised by volun- tary efforts.	Volumes purchased during the year.	No. of rural schools provided with suit- able library cases.	No. of sub-districts provided with libraries.	No. of independent districts provided with libraries.
Adair.....	4782	\$ 246.60	\$15.90	487	64	119	6
Adams.....	2406	35.45	24.10	66	49	65	80
Allamakee.....	5854	197.18	95.61	285	119	42	77
Appanoose.....	4156	288.43	40.00	492	87	78	15
Audubon.....	8408	189.54		872	66		
Benton.....	12342	285.17	963.27	2539	89	82	86
Black Hawk.....	11164	440.71	632.50	2021	57	55	8
Boone.....	12077	618.84	146.25	696	94	80	47
Bremor.....	8403	138.73	15.32	471	76	81	51
Buchanan.....	6714	307.11	35.66	336	55	77	55
Buena Vista.....							
Butler.....	7986	270.50	278.21	766	85	96	58
Calhoun.....	18853	261.24	350.00	1376	109	131	
Carroll.....	5074	524.66	64.26	382	43	84	10
Cass.....	8281	155.83	164.03	407	68	67	2
Cedar.....	7694	306.72	15.73	444	60	106	32
Cerro Gordo.....	7674	197.53	20.00	442	94	103	24
Cherokee.....	19460	197.95	88.34	275	128	128	7
Chickasaw.....	5067	147.90	80.25	187	37	28	39
Clarke.....	255	174.68		296	82	76	24
Clay.....	8966	202.80	25.00	444	92	12	
Clayton.....	9166	676.66	114.00	745	85	132	14
Clinton.....	8322	420.48	925.00	1706	94	182	23
Crawford.....	7351	324.03	24.00	641	69	141	
Dallas.....	8153	763.09	76.00	1500	110	114	26
Davis.....	2437					84	
Decatur.....	3907	81.80	152.80	587	60	59	32
Delaware.....	6635	304.10		547	122	111	11
Des Moines.....	3373	104.16	70.75	333	13	22	85
Dickinson.....	4618	122.23	14.80	273	82	10	1
Dubuque.....	8377	450.00	1155.00	2850	117	65	62
Emmet.....	9087	149.04	785.00	206	76		
Fayette.....	11847	197.25	145.23	548	46	87	65
Floyd.....	8550	193.72	122.60	555	90	90	10
Franklin.....	5845	259.19	22.50	601	66	102	28
Fremont.....	7906	228.46	59.00	550	112	95	11
Greene.....	5056	205.08	8.50	387	85	120	8
Grundy.....	4540	228.73	23.75	305	75	75	43
Guthrie.....	5135	552.80	187.00	685	101	110	4
Hamilton.....	5020	276.47	0.80	547	132	107	25
Hancock.....	6424	393.54	187.67	1084	97	127	
Hardin.....	7704	230.3	5.00	514	64	76	59
Harrison.....	655	273.64	43.54	612	57	4	17
Henry.....	6577	101.85	14.80	209	55	52	63
Howard.....	4879	\$ 148.41	\$ 119.10	404	85	92	7
Humboldt.....	8730	152.95	238.62	739	64	75	9
Ida.....	7357				85		
Iowa.....	10568	297.41	234.45	1902	78	76	56
Jackson.....	4081	128.15		61	57	86	20
Jasper.....	6884	146.77	53.82	501	117	142	17
Jefferson.....	3227	182.50	79.50	432	52	69	23
Johnson.....	1617	222.09	315.00	1102	80	14	40
Jones.....	10293	206.28	89.63	485	100	70	47
Keokuk.....	7952	233.55	22.60	760	51	24	100
Kossuth.....	8155	602.75	450.45	2502	107	198	

## SPECIAL LIBRARY REPORT.

Counties.	Number of volumes in the libraries.	Amount of money expended from district fund, for library books.	Amount expended raised by volun- tary efforts.	Volumes purchased during the year.	No. of rural schools provided with uni- table library cases.	No. of sub-districts provided with libraries.	No. of independent districts provided with libraries.
Lee.....	6758	258 17	7 87	479	63	46	81
Linn.....	13521	474.56	54.60	743	124	105	65
Louisa.....	6187	195.91	68.78	832	50	58	15
Lucas.....	4193	246 28	95.48	799	4	38	57
Lyon.....	6792	393.70	.....	810	46	71	10
Madison.....	4018	829.28	50.00	453	90	73	17
Mahaska.....	6449	254.72	116.65	618	40	62	59
Marion.....	6822	892.53	96 79	725	12	22	100
Marshall.....	8481	684.06	125.09	712	65	74	37
Mills.....	12426	157.42	34.84	401	70	1	55
Mitchell.....	1,772	169.04	.....	834	8	51	38
Monona.....	3708	129.71	6.00	354	14	76	4
Monroe.....	8,91	171.96	79.00	446	28	72	80
Montgomery.....	6442	71 00	.....	1 8	60	78	18
Muscatine.....	4231	59.14	20.00	164	.....	.....	.....
O'Brien.....	17777	175 56	158.60	455	183	174	...
Oscola.....	11522	90.01	260 46	988	85	91	.....
Page.....	6338	860.02	117.06	857	82	86	84
Palo Alto.....	24675	282 51	.....	6575	132	133	.....
Plymouth.....	8715	405.82	78.00	814	84	149	1
Pocahontas.....	13199	104.07	238.79	676	84	174	7
Polk.....	9087	535.90	87.95	1177	62	77	60
Pottawattamie.....	18188	673 98	133.00	1678	225	214	18
Poweshiek.....	6099	464.18	23 52	662	40	114	15
Ringgold.....	4418	201.83	20.00	328	61	78	29
Sac.....	10207	225.54	680.16	1690	120	182	.....
Scott.....	12949	503 20	.....	1012	69	74	23
Shell.....	9658	539.06	400.00	.....	135	198	.....
Sioux.....	11226	285.25	18.50	546	108	157	2
Stor.....	6608	595.52	.....	850	114	114	15
Tama.....	9,061	837.06	50.25	832	80	95	78
Taylor.....	8,666	135.36	72.78	370	86	79	15
Union.....	5,717	105.10	.....	230	29	106	18
Van Buren.....	3,859	137.78	63.21	321	26	62	34
Wapello.....	29,067	297.88	242.18	623	70	55	88
Warren.....	6,631	312.00	80.50	620	80	52	80
Washington.....	13,120	256.78	118.45	1,842	90	50	72
Wayne.....	5,702	891.89	243 67	974	46	92	23
Webster.....	15,650	870.40	228.02	848	117	136	84
Winnebago.....	4,636	150.61	44.80	813	41	77	5
Winneshiek.....	8,632	824.14	21.16	839	90	98	34
Woodbury.....	9,917	876.52	339.13	527	189	84	9
Worth.....	4,358	481.09	182.25	1,224	75	87	.....
Wright.....	12,686	151.63	186.00	990	126	128	8
al.....	779,984	\$27,658.08	\$18,622.92	78,791	7,524	8,215	2,622



# Conditions and Needs

== of ==

## Iowa Rural Schools.

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1. Country School Statistics.
  2. The Country School Problem.
  3. Present Status of Consolidation.
  4. One Phase of the Teacher Problem.
  5. School Buildings and Grounds.
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**JOHN F. RIGGS,**

Superintendent of Public Instruction.

**1905.**

DES MOINES:

B. MURPHY, STATE PRINTER.



## INTRODUCTION.

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It was our purpose to secure accurate and complete reports from every rural school in Iowa, showing the enrollment, average daily attendance, length of the school year and salaries of teachers; but many secretaries found it impossible to furnish the data asked for, but 10,019 schools reporting out of a total of 12,521. By reference to Table No. I the number of rural schools maintained in each county may be seen, as also the number of schools reporting.

While the statistics are incomplete, they are sufficiently full to show conditions as they actually exist in this State. In Tables III, IV and V, showing average daily attendance, fractions of less than one-half are omitted, while fractions of one-half or over are counted as units.

This report is issued in the hope of awakening greater public interest in the rural schools, to the end that country children may be gathered in better schoolhouses, trained by better teachers and have that training extend through a longer school year without the interruptions now so common in the frequent change of teachers.

TABLE No. I.

Counties.	Number rural schools.	Number rural schools reporting.	Number in session last year, 6 months or less.	Number in session more than 6 and less than 7 months.	Number in session 7 months.	Number in session more than 7 and less than 8 months.	Number in session 8 months.	Number in session more than 8 and less than 9 months.	Number in session 9 months.
Adams .....	104	88	2	1	1	4	44	11	6
Audubon .....	104	104	2	1	1	9	70	18	5
Adair .....	137	119	1	1	1	8	90	16	4
Appanoose .....	118	88	42	3	11	5	14	2	11
Allamakee .....	126	45	6	1	25	1	11	1	1
Benton .....	168	126	4	1	6	7	63	21	24
Buchanan .....	132	132	6	1	5	2	65	13	41
Boone .....	145	121	3	1	22	11	61	15	9
Butler .....	135	78	1	1	2	6	52	11	4
Black Hawk .....	140	106	2	2	4	8	66	5	20
Buena Vista .....	123	68	2	1	17	2	54	18	26
Bremer .....	97	72	11	4	18	7	22	5	5
Cass .....	140	118	1	1	1	2	54	18	42
Clayton .....	167	151	12	1	16	13	77	12	20
Carroll .....	134	68	2	1	5	1	24	6	29
Chickasaw .....	109	51	1	1	10	5	23	5	6
Crawford .....	166	77	1	1	1	1	51	5	19
Calhoun .....	138	180	3	1	5	8	101	2	16
Cerro Gordo .....	184	117	4	1	9	8	67	15	18
Clay .....	123	118	1	1	2	4	69	6	85
Clinton .....	157	157	1	1	1	1	63	7	84
Clerke .....	182	117	2	1	1	1	85	10	13
Clarke .....	102	85	4	3	22	8	45	4	4
Cedar .....	133	128	8	1	18	18	89	10	3
Dallas .....	183	100	1	1	3	1	78	5	11
Dickinson .....	72	24	1	1	1	4	14	1	3
Davis .....	96	84	47	2	19	4	10	1	1
Des Moines .....	84	62	2	1	8	6	80	9	7
Decatur .....	111	56	17	1	8	8	26	1	1
Delaware .....	130	96	1	1	1	4	50	16	24
Dubuque .....	124	115	2	1	2	3	49	2	2
Emmet .....	74	67	4	1	11	1	44	1	6
Fayette .....	175	125	5	1	14	15	54	18	17
Floyd .....	113	111	1	3	8	28	63	10	8
Franklin .....	137	117	3	1	2	4	92	11	5
Fremont .....	117	109	8	1	12	2	24	11	56
Greene .....	166	102	1	1	1	1	60	39	2
Grundy .....	119	98	1	1	5	6	50	10	29
Guthrie .....	142	129	1	2	1	6	98	6	17
Hamilton .....	135	125	3	2	20	19	68	8	5
Harrison .....	145	66	1	1	1	1	41	1	24
Hancock .....	122	108	2	1	24	9	52	5	26
Hardin .....	129	76	1	1	13	1	44	12	1
Henry .....	67	87	2	2	10	18	47	5	18
Howard .....	93	96	1	1	1	8	69	6	15
Humboldt .....	108	96	1	1	13	16	50	6	27
Ida .....	99	98	1	1	1	1	71	9	16
Iowa .....	135	121	5	1	8	8	74	9	23
Jackson .....	136	77	1	1	2	1	46	5	5
Jasper .....	177	120	1	1	4	8	66	37	5
Jefferson .....	92	91	2	1	15	89	31	4	1

TABLE No. I—CONTINUED.

Counties.	Number rural schools.	Number rural schools reporting.	Number in session last year, 6 months or less.	Number in session more than 6 and less than 7 months.	Number in session 7 months.	Number in session more than 7 and less than 8 months.	Number in session 8 months.	Number in session more than 8 and less than 9 months.	Number in session 9 months.
Johnson.....	155	118	7	.....	6	7	37	7	54
Jones.....	130	115	3	1	4	6	58	24	19
Keokuk.....	125	111	7	7	22	15	45	9	6
Kossuth.....	211	178	8	1	7	4	107	10	41
Lee.....	101	91	13	1	36	5	28	6	2
Linn.....	167	134	2	3	17	26	51	18	18
Louisa.....	78	74	1	.....	3	7	45	1	17
Lucas.....	90	53	5	2	8	6	21	4	7
Lyon.....	127	86	.....	1	2	1	21	5	56
Madison.....	134	72	.....	.....	13	5	50	3	1
Mahaska.....	135	94	1	5	4	20	49	10	11
Marion.....	135	65	9	1	18	4	9	4	20
Marshall.....	126	121	1	.....	7	10	68	30	5
Mills.....	81	79	1	.....	4	.....	30	6	38
Mitchell.....	89	61	.....	1	17	8	18	11	6
Monona.....	142	132	.....	.....	.....	.....	85	10	37
Monroe.....	92	92	10	1	45	6	20	2	8
Montgomery.....	103	96	2	1	9	4	68	11	1
Muscatine.....	87	57	.....	.....	6	4	10	3	34
O'Brien.....	135	123	1	.....	3	2	60	12	50
Oscola.....	90	65	2	.....	8	.....	44	6	5
Page.....	118	115	7	1	21	4	44	12	26
Palo Alto.....	122	91	.....	1	13	6	57	5	9
Plymouth.....	176	131	.....	1	1	11	64	14	40
Pocahontas.....	130	125	7	3	29	.....	68	1	17
Polk.....	142	129	11	2	14	2	61	11	28
Pottawattamie.....	226	155	1	2	1	7	23	24	107
Poweshiek.....	133	106	4	.....	2	8	72	17	3
Ringgold.....	123	117	4	.....	12	10	82	5	4
Sac.....	130	126	.....	1	2	3	66	30	21
Scott.....	103	69	.....	.....	.....	.....	1	5	63
Shelby.....	132	76	.....	.....	.....	3	21	9	43
Sioux.....	170	159	1	.....	3	.....	14	2	139
Story.....	133	102	3	4	10	10	62	13	.....
Tama.....	167	142	3	1	7	16	94	14	7
Taylor.....	113	74	1	.....	1	5	52	8	7
Union.....	103	101	.....	1	8	15	50	13	19
Van Buren.....	109	98	14	4	24	8	48	2	3
Wapello.....	96	87	.....	.....	16	12	45	2	12
Warren.....	130	90	3	2	22	22	34	4	3
Washington.....	123	122	1	1	19	24	62	10	5
Wayne.....	117	86	9	3	49	.....	22	.....	3
Webster.....	174	108	10	5	43	12	83	7	8
Winnebago.....	85	79	36	2	21	1	15	1	3
Winneshiek.....	137	96	31	4	35	8	14	2	2
Woodbury.....	178	156	0	3	6	2	45	12	83
Worth.....	83	84	18	11	34	3	14	1	3
Wright.....	128	113	2	.....	7	5	86	3	13
Total.....	12,521	10,019	469	114	1,016	650	4,947	865	1,953

TABLE No. II.

County.	Number of Districts Having a School Enumeration of:						Number of Schools Enrolling Fall Term.													
	1 to 5.	6 to 10.	11 to 15.	16 to 20.	21 to 25.	More than 25.	5 or less.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16 to 20.	More than 20.	
Audubon	1	8	6	5	5	59	...	...	...	...	1	2	8	4	4	6	4	31	40	
Adams	1	1	5	18	10	30	...	...	...	1	3	4	8	4	1	8	8	23	23	
Adair	1	1	6	17	21	48	...	1	2	8	8	4	4	10	8	8	2	33	36	
Appanoose	...	...	7	1	10	45	...	...	...	...	...	...	1	2	1	...	2	9	38	
Allamakee	...	1	4	8	10	25	...	...	...	...	...	...	1	...	...	8	1	2	10	
Benton	...	4	16	16	23	56	...	2	4	1	6	11	8	7	6	8	6	34	24	
Buchanan	...	...	...	...	...	...	...	8	2	2	4	8	5	6	6	7	11	6	40	
Boone	...	1	12	10	18	79	...	2	...	3	1	2	2	1	8	5	6	22	33	
Butler	...	8	10	10	13	27	...	4	2	4	2	5	7	9	8	9	9	35	38	
Black Hawk	...	8	9	13	19	74	...	2	...	3	5	5	7	8	6	6	8	37	26	
Buena Vista	...	2	5	5	16	12	...	8	1	8	...	...	3	3	4	5	5	19	13	
Bremer	2	2	6	4	11	38	...	2	...	8	1	8	2	8	4	2	2	4	15	
Cass	...	...	10	20	23	54	...	4	1	4	8	4	4	2	1	5	6	9	30	
Clayton	1	8	4	13	7	104	...	2	1	2	1	2	2	2	4	6	2	4	18	
Carroll	...	8	9	1	15	27	...	4	6	1	8	10	8	4	6	8	5	4	11	
Crawford	...	9	7	2	21	36	...	2	...	2	3	2	2	3	4	3	2	4	16	
Calhoun	1	2	12	23	20	49	...	1	2	4	5	8	5	11	7	10	8	32	22	
Cerro Gordo	...	9	20	25	21	35	...	2	4	10	10	8	6	5	5	7	9	21	15	
Clay	1	7	24	20	19	43	...	8	1	6	8	10	8	3	4	5	6	25	20	
Clinton	...	1	12	25	24	92	...	8	...	2	4	10	5	10	6	8	13	33	43	
Cherokee	...	8	14	21	25	38	...	8	3	6	5	12	9	4	8	4	7	34	13	
Chickasaw	...	...	4	5	7	28	...	1	...	1	1	4	1	3	3	1	8	8	13	
Clarke	1	2	15	16	16	40	...	3	4	8	8	4	3	1	9	8	4	24	41	
Cedar	...	3	12	14	22	46	...	4	1	5	2	7	6	9	15	7	10	34	17	
Dallas	...	3	13	8	14	33	...	3	1	...	8	2	2	6	5	6	5	20	33	
Dickinson	...	...	8	4	8	8	...	...	1	...	3	...	2	...	4	1	...	2	3	
Davis	...	1	5	4	18	65	...	...	...	...	1	...	1	...	1	...	1	10	49	
Des Moines	...	1	4	10	4	49	...	...	...	1	2	3	8	...	1	5	1	11	24	
Decatur	...	2	6	5	8	42	...	1	...	...	8	1	...	1	3	1	3	17	27	
Delaware	...	2	4	8	10	46	...	1	2	...	2	6	4	5	...	5	5	21	29	
Dubuque	1	4	2	4	8	81	...	6	8	1	2	5	2	2	5	5	2	16	43	
Emmet	...	4	9	22	14	23	...	1	...	1	...	1	1	...	1	...	1	23	3	
Fayette	...	1	4	17	11	68	...	1	2	3	2	5	...	5	5	9	5	35	36	
Floyd	...	9	10	25	27	41	...	2	4	2	4	5	15	7	8	7	6	11	25	
Franklin	1	8	14	24	25	48	...	8	3	2	7	8	5	7	8	6	8	18	16	
Fremont	2	8	12	12	16	42	...	2	...	...	8	2	8	4	7	5	5	26	38	
Greene	...	2	11	17	23	44	...	1	2	4	4	4	4	8	1	9	6	7	31	
Grundy	...	2	11	15	17	39	...	8	2	4	4	5	3	8	6	5	10	4	18	
Guthrie	...	3	7	10	8	57	...	5	1	2	2	9	8	3	6	10	5	47	33	
Hamilton	...	2	5	18	26	85	...	2	1	2	2	2	5	2	6	7	10	23	45	
Harrison	...	1	4	6	9	42	...	1	1	1	2	...	1	1	3	5	4	11	35	
Hancock	1	7	19	14	22	44	...	1	7	2	...	6	8	5	3	7	5	25	31	
Hardin	...	6	6	15	12	43	...	8	4	2	2	2	6	1	5	5	3	4	20	
Henry	...	1	7	14	8	61	...	1	...	1	3	2	6	7	4	4	8	17	35	
Howard	...	1	5	18	14	65	...	1	1	3	3	4	5	6	5	2	7	22	21	
Humboldt	...	5	6	16	12	43	...	2	1	5	4	5	5	3	4	2	5	20	13	
Ida	...	...	7	22	29	47	...	1	1	1	2	4	5	8	4	9	9	34	17	
Iowa	...	2	4	14	18	36	...	1	1	8	4	4	8	7	2	12	6	7	31	
Jackson	...	...	5	7	16	45	...	1	3	2	8	...	4	6	1	2	3	11	23	
Jasper	1	8	7	16	16	54	...	8	8	2	8	6	2	4	8	4	5	39	31	
Jefferson	...	1	7	7	4	59	...	...	...	1	1	2	2	1	4	6	1	15	45	



TABLE No. 2—

County.	Number of Districts Having a School Enumeration of:						Number of Schools Enrolling Fall Term.													
	1 to 5.	6 to 10.	11 to 15.	16 to 20.	21 to 25.	More than 25.	5 or less.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16 to 20.	More than 20.	
Johnson.....	2	6	19	20	80	...	...	4	5	2	6	7	5	7	4	6	25	47		
Jones.....	2	9	19	23	69	...	...	4	4	3	5	8	4	7	5	12	28	49		
Keokuk.....	1	10	19	20	76	...	...	1	6	3	6	3	2	7	7	4	80	47		
Kossuth.....	3	6	20	47	55	...	...	2	2	1	3	6	3	2	7	14	27	19		
Lee.....	1	3	16	16	62	...	...	1	1	1	2	...	2	...	...	4	12	20		
Linn.....	4	7	8	17	64	...	...	3	7	5	4	6	1	9	3	4	23	60		
Louisa.....	1	3	5	12	33	...	...	1	1	2	2	2	1	2	4	1	21	22		
Lucas.....	1	1	3	6	38	...	...	1	...	1	...	...	1	...	1	3	6	30		
Lyons.....	4	10	6	17	36	...	...	1	5	1	...	1	4	5	10	3	25	14		
Madison.....	2	3	10	23	34	...	...	1	1	1	...	1	4	...	1	3	5	21	27	
Mahaska.....	1	2	12	12	70	...	...	3	1	1	1	2	...	1	3	3	5	15	57	
Marion.....	1	10	4	14	47	...	...	...	...	...	1	1	2	...	7	2	5	7	25	
Marshall.....	1	10	11	19	80	...	...	5	4	2	7	4	11	6	4	10	3	29	37	
Mills.....	1	3	8	12	55	...	...	1	1	1	1	4	2	6	2	6	2	18	33	
Mitchell.....	1	2	5	13	15	...	...	1	2	...	3	...	1	4	3	5	1	17	9	
Monona.....	...	8	13	11	46	...	...	3	6	6	2	7	8	7	4	3	7	30	39	
Monroe.....	...	5	8	13	65	...	...	1	1	...	2	2	2	1	...	...	...	9	23	
Montgomery.....	4	7	17	16	23	...	...	3	1	4	2	9	1	5	3	8	3	27	28	
Muscatine.....	1	4	9	6	31	...	...	1	...	2	1	2	4	4	1	...	2	21	18	
O'Brien.....	1	1	10	20	36	...	...	3	4	5	1	3	4	5	10	5	11	35	23	
Osceola.....	1	2	3	11	13	...	...	2	2	1	1	3	1	7	4	3	1	6	6	
Page.....	1	2	12	17	76	...	...	2	2	1	2	4	3	3	1	8	3	24	54	
Palo Alto.....	4	19	20	9	25	...	...	2	...	4	3	6	1	3	6	3	5	14	10	
Plymouth.....	2	4	24	23	60	...	...	1	1	2	3	8	11	8	5	12	6	30	29	
Pocahontas.....	1	6	11	24	33	...	...	2	2	2	5	1	2	3	3	8	6	25	16	
Polk.....	...	9	9	21	86	...	...	1	2	...	1	2	4	3	6	2	3	25	70	
Pottawattamie.....	2	4	14	14	86	...	...	1	2	...	5	4	2	6	12	10	10	38	58	
Poweshiek.....	1	2	16	22	49	...	...	4	2	4	5	3	4	4	10	3	4	36	20	
Ringgold.....	3	12	22	21	54	...	...	1	1	...	...	6	6	2	4	3	2	24	41	
Sac.....	7	10	26	20	50	...	...	6	2	3	4	10	7	5	11	11	7	29	28	
Scott.....	...	1	4	9	46	...	...	...	...	...	1	1	...	...	4	3	...	8	23	
Shelby.....	...	5	5	15	40	...	...	2	2	3	2	4	3	6	4	5	3	24	20	
Sieus.....	2	3	9	16	33	...	...	2	4	2	4	8	5	12	8	8	4	48	39	
Story.....	1	6	18	22	49	...	...	1	1	2	5	4	3	5	6	6	8	19	27	
Tama.....	8	3	17	26	60	...	...	5	2	4	4	6	8	7	7	10	9	43	34	
Taylor.....	1	5	8	21	38	...	...	1	...	...	1	3	3	2	4	1	7	21	30	
Union.....	1	8	7	9	37	...	...	2	1	5	5	7	4	3	8	9	9	21	33	
Van Buren.....	4	7	18	14	66	...	...	1	2	...	2	1	1	11	1	8	7	20	49	
Wapello.....	...	7	9	10	71	...	...	...	2	2	4	1	3	2	2	2	2	12	65	
Warren.....	3	6	11	13	59	...	...	1	...	1	...	5	2	3	2	3	3	17	32	
Washington.....	1	15	19	23	66	...	...	2	7	5	1	4	6	5	3	10	5	41	32	
Wayne.....	1	2	3	9	55	...	...	...	...	1	...	2	3	1	3	...	2	1	34	
Webster.....	7	9	29	30	87	...	...	1	5	5	4	9	8	6	8	5	8	31	44	
Winnebago.....	2	1	4	9	50	...	...	1	2	...	2	2	...	...	1	1	2	13	5	
Winneshek.....	2	...	6	9	58	...	...	1	2	...	2	2	...	...	1	4	1	6	13	
Woodbury.....	5	15	14	24	65	...	...	2	3	3	2	5	6	4	10	4	14	38	43	
Worth.....	...	1	4	8	19	...	...	...	1	2	...	1	2	...	1	1	4	8	18	
Wright.....	5	7	25	15	51	...	...	1	1	5	3	5	7	3	7	7	8	16	21	
Total.....	31	276	773	1344	1606	5299	163	138	213	263	335	395	393	445	493	511	465	2258	2874	

## COUNTRY SCHOOL STATISTICS.

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CONTINUED.

Number of Schools Enrolling Winter Term.																	Number of Schools Enrolling Spring Term.																								
6 or less.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16 to 20.	More than 20.	6 or less.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16 to 20.	More than 20.	6 or less.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16 to 20.	More than 20.			
1	2	1	4	6	8	6	7	8	8	9	22	61	1	2	6	4	1	2	6	2	2	5	7	27	48	1	2	6	4	1	2	6	2	2	5	7	27	48			
1	1	1	4	4	4	6	4	4	4	4	80	48	1	4	8	4	1	4	8	2	7	7	4	30	45	1	4	8	4	1	4	8	2	7	7	4	30	45			
5	1	...	...	5	8	1	6	5	7	2	37	59	1	...	2	1	1	8	4	7	5	5	6	26	37	5	1	...	...	5	8	1	6	5	7	2	36	58			
5	1	8	6	8	12	10	15	14	10	9	68	45	4	6	8	15	11	18	19	17	12	13	8	34	30	4	6	8	15	11	18	19	17	12	13	8	34	30			
1	...	2	3	...	1	...	2	2	4	4	18	41	8	1	4	...	2	8	4	4	8	2	...	15	28	1	...	2	3	...	1	...	2	3	...	1	...	2	3		
1	...	2	2	6	4	4	6	9	8	4	25	64	8	1	4	4	6	8	5	9	7	7	...	26	53	1	...	2	2	6	4	4	6	9	8	4	25	64			
1	...	1	1	1	4	1	8	5	2	4	16	25	2	1	1	2	1	8	7	1	2	...	20	19	1	...	1	1	1	4	1	8	5	2	4	16	25				
6	...	1	1	2	1	1	4	6	6	4	25	32	6	1	5	2	1	4	5	5	7	7	7	34	22	6	...	1	1	2	1	1	4	6	6	4	25	32			
1	1	1	1	1	2	2	2	1	5	8	20	38	1	1	4	...	4	2	2	2	4	4	4	16	28	1	1	1	1	4	...	4	2	2	2	4	4	16	28		
...	2	2	2	2	2	1	1	1	1	...	22	62	...	1	1	1	2	2	2	2	2	2	4	21	51	...	2	2	2	2	2	2	2	2	2	2	4	4	21	51	
2	1	...	2	2	2	2	2	1	2	...	15	36	1	1	1	2	...	1	8	2	8	4	1	15	30	2	1	...	2	2	2	2	2	2	2	2	15	36			
...	2	1	4	4	6	8	2	4	9	8	32	47	4	4	8	...	7	6	8	8	8	9	8	30	34	...	2	1	4	4	6	8	2	4	9	8	32	47			
1	8	1	3	2	2	4	4	8	4	5	19	36	2	2	2	2	4	8	1	1	2	7	19	32	1	8	1	3	2	2	4	4	8	4	5	19	36				
1	...	7	3	5	7	7	8	1	11	8	16	18	1	1	2	2	6	8	1	3	5	4	18	14	...	7	3	5	7	7	8	1	11	8	16	18	14				
1	1	7	3	5	7	7	8	1	11	8	16	18	1	1	2	2	6	8	1	3	5	4	18	14	...	7	3	5	7	7	8	1	11	8	16	18	14				
2	2	8	1	1	1	2	5	3	3	2	30	34	8	...	4	4	8	7	8	5	5	4	...	16	49	2	2	8	1	1	2	2	5	3	3	2	30	34			
...	1	1	1	1	2	3	8	1	2	2	18	27	2	1	1	1	1	8	8	5	...	...	12	21	22	...	1	1	1	1	2	3	8	1	2	2	18	27			
1	...	1	1	1	8	4	8	8	9	8	30	40	2	2	1	5	6	8	6	10	6	18	16	39	20	1	...	1	1	1	8	4	8	8	9	8	30	40			
...	2	...	2	2	2	4	8	8	8	8	22	21	8	2	2	2	8	1	6	5	5	8	5	14	6	...	2	...	2	2	2	2	2	2	2	2	21	21			
4	1	1	2	6	1	2	4	3	5	8	35	58	2	2	2	1	3	8	6	8	8	5	2	39	39	4	1	1	2	6	1	2	4	3	5	8	35	58			
1	1	...	3	3	1	8	1	8	5	6	22	20	8	5	...	2	4	7	6	8	4	7	8	15	...	1	1	...	3	3	1	8	1	8	5	6	22	20			
2	...	4	2	7	10	8	2	6	2	6	39	46	2	8	4	5	8	7	8	8	9	7	11	81	88	2	...	4	2	7	10	8	2	6	2	6	39	46			
...	1	1	2	5	1	4	6	10	2	17	37	44	3	...	2	8	6	18	9	10	7	10	5	32	24	...	1	1	2	5	1	4	6	10	2	17	37	44			
...	2	...	2	4	2	2	2	2	2	2	38	79	2	2	1	1	3	8	5	2	8	8	8	26	68	...	2	...	2	4	2	2	2	2	2	2	38	79			
...	8	1	4	8	5	6	6	6	9	8	78	78	4	1	8	...	6	6	18	12	8	7	47	53	...	8	1	4	8	5	6	6	6	9	8	78	78				
2	8	4	5	1	1	7	6	6	8	7	80	81	5	2	8	2	7	4	9	4	9	6	6	22	25	2	8	4	5	1	1	7	6	6	8	7	80	81			
1	...	2	4	4	4	4	4	4	4	6	81	84	1	2	...	4	4	5	4	5	3	8	4	21	21	1	...	2	4	4	4	4	4	4	6	8	81	84			
2	1	1	8	8	2	5	7	11	12	8	32	39	3	8	1	4	4	8	6	5	9	8	11	40	20	2	1	1	8	8	2	5	7	11	12	8	32	39			
...	1	...	1	1	1	...	2	1	1	2	5	44	...	...	3	...	1	1	2	1	1	2	5	16	36	...	1	...	1	1	1	...	2	1	1	2	5	44	...		
...	1	...	1	1	1	1	4	4	4	3	16	40	1	...	1	2	9	2	4	2	4	9	23	16	...	1	...	1	1	1	...	2	4	4	3	16	40				
2	...	2	...	8	4	8	4	9	9	8	32	67	1	...	4	8	8	5	8	9	2	10	7	43	55	2	...	2	...	8	4	8	4	9	9	8	32	67			
...	2	1	...	8	8	6	8	6	5	5	27	38	...	...	1	1	10	4	8	9	11	8	1	23	20	...	2	1	...	8	8	6	8	6	5	5	27	38			
1	1	4	2	1	3	6	2	8	1	11	48	53	6	7	4	5	7	7	6	1	5	9	5	43	30	1	1	4	2	1	3	6	2	8	1	11	48	53			
1	...	1	1	1	2	1	1	4	2	4	16	35	1	1	2	...	4	1	8	2	5	6	3	14	32	1	...	1	1	1	2	...	4	1	8	2	5	6	3	14	32
1	2	5	...	2	5	5	8	7	6	8	27	34	5	3	8	10	4	4	5	5	3	4	6	21	29	1	2	5	...	2	5	5	8	7	6	8	27	34			
...	2	2	8	8	2	2	6	6	4	6	28	43	...	...	2	2	1	2	3	6	8	6	5	22	31	...	2	2	8	8	2	2	6	6	4	6	28	43			
...	...	2	2	...	5	2	3	3	1	1	12	47	2	2	...	...	4	4	1	5	8	5	4	20	43	...	...	2	2	...	5	2	3	3	1	1	12	47			
1	...	2	2	2	2	2	3	1	1	8	23	56	...	1	1	1	1	5	4	4	6	3	2	27	36	1	...	2	2	2	2	2	2	3	1	1	8	23	56		
2	1	2	1	5	2	7	6	5	8	9	32	47	3	2	5	2	5	8	4	9	9	6	38	33	2	1	2	1	5	2	7	6	5	8	9	32	47				
...	1	1	1	...	7	1	1	1	1	1	18	52	...	...	1	1	2	2	2	2	2	8	21	37	...	1	1	1	1	...	7	1	1	1	1	1	18	52			
2	...	2	6	6	5	8	11	8	10	12	39	52	6	4	5	2	8	9	13	11	7	10	10	34	38	2	...	2	6	6	5	8	11	8	10	12	39	52			
...	...	...	8	1	1	...	2	2	2	2	20	42	...	1	...	4	2	4	5	8	9	5	21	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
1	1	1	1	1	2	8	2	2	1	2	18	62	1	1	3	2	...	3	8	6	8	2	3	19	43	1	1	1	1	1	2	8	2	2	1	2	18	62			
2	1	2	2	1	4	8	7	6	14	12	27	64	1	4	2	6	5	10	9	8	7	10	11	31	45	2	1	2	2	1	4	8	7	6	14	12	27	64			
...	...	2	2	2	2	...	4	6	5	5	20	27	...	1	1	3	2	6	4	4	6	5	5	20	25	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	2	8	...	8	8	8	4	6	7	5	32	39	8	2	8	8	5	7	6	8	4	8	6	24	20	...	2	8	...	8	8	8	4	6	7	5	32	39			
123	90	154	181	271	386	506	497	469	462	531	2,496	3,974	218	171	257	306	391	463	496	542	549	576	549	2,324	2,774	123	90	154	181	271	386	506	497	469	462	531	2,496	3,974			

TABLE No. III.

FALL TERM 1903.

Number of schools having an average daily attendance of:

Counties.	1	2	3	4	5	6	8	9	10	11	12	13	14	15	16 to 20	More than 20	
Audubon .....	..	..	..	2	..	1	8	4	4	7	10	8	9	6	8	23	18
Adams .....	..	..	..	..	..	1	6	8	5	3	2	7	8	5	4	16	7
Adair .....	..	..	..	8	1	7	5	6	9	6	7	10	15	3	22	11	
Appanoose .....	..	..	..	..	1	..	1	..	1	..	8	4	5	4	1	11	20
Allamakee .....	..	..	..	..	..	..	1	1	..	..	8	1	1	2	..	8	8
Benton .....	1	..	1	..	7	7	5	12	6	9	9	6	7	10	8	24	15
Buchanan .....	..	8	..	..	8	9	6	8	6	11	11	7	8	11	12	25	16
Butler .....	..	1	5	4	2	6	9	11	11	14	11	8	5	11	11	24	13
Boone .....	..	..	..	8	4	1	2	8	4	8	7	8	9	6	5	25	15
Black Hawk .....	..	..	1	8	2	7	6	12	8	10	5	5	5	17	23	13	
Buena Vista .....	1	8	..	8	8	6	1	5	5	8	9	7	6	4	5	1	
Bremer .....	..	1	..	2	8	1	2	6	8	2	4	6	1	4	1	8	5
Cass .....	..	..	8	1	6	2	1	8	8	8	8	5	17	7	9	84	9
Clayton .....	..	..	2	..	2	2	4	8	1	6	4	..	4	9	..	17	17
Carroll .....	..	2	2	3	5	6	7	6	8	7	8	8	1	4	2	9	1
Crawford .....	..	..	2	2	2	5	6	9	6	2	9	4	8	5	1	16	8
Calhoun .....	..	..	1	3	1	8	8	10	5	12	14	6	12	15	4	13	6
Cerro Gordo .....	..	..	1	2	10	12	10	10	8	4	10	4	9	6	6	15	4
Clay .....	..	2	4	3	4	6	11	8	6	7	8	7	10	6	3	13	9
Clinton .....	..	..	2	1	1	1	4	14	7	18	12	11	5	10	10	81	18
Cherokee .....	..	..	1	2	5	7	5	10	10	8	10	7	12	7	8	22	8
Chickasaw .....	..	..	1	..	..	1	1	4	2	4	..	3	8	4	2	8	6
Clarke .....	..	..	..	..	3	4	8	5	5	5	6	9	1	1	6	23	11
Cedar .....	..	..	1	8	8	1	6	2	18	5	18	18	11	6	11	29	13
Dallas .....	..	..	1	..	2	8	8	6	7	8	8	6	8	7	4	21	12
Dickinson .....	..	..	1	..	2	..	4	8	4	1	3	1	1	..	1	6	2
Davis .....	..	..	..	..	..	..	2	4	1	5	4	1	..	..	5	15	27
Des Moines .....	..	..	1	..	..	..	3	2	4	1	8	2	4	8	4	14	18
Decatur .....	..	..	..	2	..	1	2	1	2	3	6	2	2	4	8	13	16
Delaware .....	..	..	1	..	2	4	3	7	7	10	10	2	8	6	10	6	21
Dubuque .....	..	..	1	8	4	5	6	4	7	6	2	4	7	7	4	12	22
Emmet .....	..	..	..	1	1	..	3	..	..	1	1	1	2	1	..	2	.....
Fayette .....	..	..	..	1	1	6	1	5	6	7	7	12	4	4	9	27	17
Floyd .....	..	..	..	..	6	8	2	10	9	12	6	10	7	7	2	17	5
Franklin .....	..	..	..	5	8	5	10	6	10	7	7	5	9	9	6	9	6
Freemont .....	..	..	1	1	..	..	4	5	7	5	5	8	7	10	2	5	29
Greene .....	..	..	..	..	6	7	8	5	7	10	8	7	12	5	9	19	8
Grundy .....	1	..	1	..	2	5	2	8	8	7	7	7	6	4	9	2	16
Guthrie .....	..	..	1	8	2	4	1	5	9	6	10	11	13	5	9	8	30
Hamilton .....	..	..	1	..	2	1	6	9	8	3	16	8	10	6	6	7	27
Hancock .....	..	1	1	5	7	3	8	5	5	9	7	6	7	4	2	12	3
Hardin .....	..	..	1	..	3	5	5	5	7	8	1	5	8	4	7	4	7
Harrison .....	..	..	1	..	2	2	..	2	3	8	1	4	4	5	4	5	21
Henry .....	..	..	..	..	..	5	6	7	2	4	7	7	4	8	5	16	22
Howard .....	..	..	..	2	5	6	5	8	6	1	5	5	6	8	3	21	5
Humboldt .....	..	..	2	2	2	4	8	3	5	5	5	9	6	4	9	11	5
Ida .....	..	..	..	1	2	8	4	6	8	10	5	12	8	6	7	18	7
Iowa .....	..	..	2	1	4	6	1	5	4	10	11	5	14	3	6	24	24
Jackson .....	..	..	..	8	..	8	5	6	5	4	6	2	8	4	7	11	13
Jasper .....	..	1	1	2	..	6	8	5	8	12	6	6	8	6	9	27	12
Jefferson .....	..	..	..	..	..	2	2	3	4	3	5	5	13	2	4	21	23

### COUNTRY SCHOOL STATISTICS.

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**TABLE No. III—CONTINUED.**

**FALL TERM, 1904.**

**Number of schools having an average daily attendance of:**

Counties.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 to 20	More than 20
Johnson.....	..	..	1	1	2	4	14	5	6	11	8	5	12	11	14	22	25
Jones.....	..	..	1	3	4	4	7	2	11	6	4	7	...	9	6	34	23
Keokuk.....	..	..	2	2	2	4	5	5	6	5	3	10	6	7	4	30	27
Kossuth.....	..	4	5	6	13	10	12	12	14	14	15	14	6	7	4	18	4
Lee.....	..	..	2	1	1	...	4	3	...	3	3	2	2	2	3	9	9
Linn.....	..	..	1	1	1	...	2	10	4	5	4	2	7	6	6	30	39
Louis.....	..	..	1	1	5	2	2	2	4	4	2	2	3	7	4	18	16
Lucas.....	..	..	1	1	...	2	2	...	1	...	1	1	1	2	3	21	11
Lyon.....	..	..	2	2	4	5	4	3	2	6	9	10	10	5	2	10	8
Madison.....	..	..	1	1	2	1	2	1	3	3	4	6	11	1	6	11	19
Mahaska.....	..	..	1	1	2	...	3	2	3	1	3	6	9	1	6	25	30
Marion.....	..	..	1	1	...	1	3	1	4	5	5	3	6	3	2	15	16
Marshall.....	..	2	...	2	7	6	9	7	4	9	11	6	10	8	9	22	15
Mills.....	..	..	2	2	2	2	5	3	5	5	5	5	3	2	7	18	21
Mitchell.....	..	..	2	1	1	2	1	5	3	4	4	2	1	4	4	9	8
Monona.....	..	..	3	1	8	9	8	13	8	6	7	5	8	5	5	28	8
Monroe.....	..	..	1	1	2	1	1	2	1	2	3	4	3	...	9	16	18
Montgomery.....	..	..	1	1	1	7	3	5	7	7	10	3	6	6	6	15	18
Muscatine.....	..	..	...	1	2	1	1	3	5	4	3	4	5	3	...	14	15
O'Brien.....	..	..	...	3	2	7	7	10	11	11	10	9	9	10	4	16	6
Osceola.....	..	..	1	2	3	3	5	4	6	3	2	3	2	1	7	...	1
Page.....	..	..	1	1	...	2	3	2	3	8	2	1	6	8	8	10	27
Palo Alto.....	..	..	1	1	5	5	3	3	8	2	7	4	3	6	4	7	8
Plymouth.....	..	..	1	5	6	9	13	11	16	8	8	12	2	5	3	19	5
Pocahontas.....	..	..	1	2	5	5	7	6	11	7	9	9	8	6	10	17	5
Polk.....	..	..	1	...	5	2	5	3	8	4	5	10	3	10	10	25	31
Pottawattamie.....	..	..	1	1	1	6	2	9	10	12	6	17	12	9	12	32	18
Powerchief.....	..	..	1	1	1	6	4	3	3	9	11	6	1	6	9	20	8
Ringgold.....	..	..	...	...	2	3	7	5	6	3	5	4	9	8	8	17	15
Sac.....	..	..	4	4	...	5	14	4	10	12	11	8	8	7	6	23	9
Scott.....	..	..	...	...	1	1	2	1	2	3	1	6	...	4	8	...	13
Shelby.....	..	..	2	...	2	2	5	7	5	5	7	4	3	6	9	15	6
Sioux.....	..	..	1	2	4	5	7	4	9	11	13	18	14	11	11	24	13
Story.....	..	..	1	1	1	3	3	5	4	7	7	7	10	6	3	20	10
Tama.....	..	..	2	3	4	3	3	10	9	10	5	13	11	10	10	29	20
Taylor.....	..	..	1	1	...	...	2	3	4	2	5	5	4	4	4	19	18
Union.....	..	..	1	2	8	5	5	7	3	9	5	5	8	4	8	19	16
Van Buren.....	..	..	1	...	...	4	2	1	5	8	3	4	4	8	7	28	29
Wapello.....	..	..	...	1	4	2	3	3	4	3	4	4	...	5	21	31	31
Warren.....	..	..	1	1	1	1	2	7	4	4	6	4	1	1	26	34	34
Washington.....	..	..	2	2	3	3	8	2	8	6	4	10	9	8	34	18	18
Wayne.....	..	..	...	...	3	1	...	3	1	3	8	...	1	4	1	18	15
Webster.....	..	1	1	2	6	4	5	12	13	8	7	7	7	4	9	24	16
Winnebago.....	..	..	2	1	1	3	2	2	2	1	...	3	7	2	2	2	1
Winnecheek.....	..	1	1	4	4	1	4	1	3	10	1	3	2	1	1	6	4
Woodbury.....	..	..	1	4	6	10	9	6	15	14	10	11	7	12	6	25	11
Worth.....	..	..	...	1	...	3	3	2	2	3	2	3	...	2	7	8	8
Wright.....	..	..	1	1	2	7	5	7	6	5	6	7	11	3	5	23	7
Total.....	3	28	85	145	298	346	450	517	576	581	616	595	616	555	533	1,832	1,300

TABLE No. IV.

WINTER TERM 1903-04.

Number of schools having an average daily attendance of:

County.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 to 20	More than 20
Audubon.....					2	3	8	1	6	1	4	4	4	8	10	26	22
Adams.....				1			4	4	5	3	4	7	5	8	6	12	15
Adair.....		1	2		4	4	4	4	5	6	7	11	6	10	37	18	13
Appanoose.....				1			2		2	6	9	6	8	7	18	38	3
Allamakee.....				1	2	1		3		6	1	8	8	8	7		4
Benton.....		2	2	5	5	5	7	6	7	8	9	11	11	5	94	14	14
Buchanan.....		1	1	2	3	7	6	5	9	7	10	10	8	10	85	15	15
Butler.....		2	2	3	5	9	8	10	11	6	11	6	5	15	25	15	15
Boone.....		1	2	4	3	6	4	2	6	12	11	13	9	7	40	21	21
Black Hawk.....			2	2	4	4	8	11	12	12	18	7	7	6	35	12	12
Buena Vista.....			1	3	3	6	2	4	3	4	11	6	7	8	5		4
Bremer.....		1	3	2	3	2	5	5	6	8	8	5	8	4	11		5
Cass.....			1	2	4	4	2	5	4	4	6	13	4	8	18	27	21
Clayton.....			3	5	5	3	6	8	2	7	6	9	9	10	31	38	
Carroll.....		1	2	2	3	2	2	9	5	6		8	8	5	8	10	3
Crawford.....		1	2	3	3	5	6	8	5	3	6	6	1	8	2	13	9
Calhoun.....				3	3	6	6	6	11	8	10	12	6	8	38	29	12
Cerro Gordo.....		1	1	7	2	6	11	11	6	7	8	11	5	7	6	20	7
Clay.....			3	5	3	10	10	7	9	6	6	7	9	8	20	12	
Clinton.....		1			2	3	10	8	10	15	5	18	8	12	13	34	16
Cherokee.....				1	3	4	5	11	15	8	15	4	4	10	9	27	5
Chickasaw.....				1	1	1	2		4	4	3	7	6	8	1	14	8
Clarke.....				2	2	5	5	5	5	2	2	7	6	6	8	17	16
Cedar.....				2	4	3	5	7	5	11	9	10	12	5	10	31	7
Dallas.....				2	1	3	3	6	7	6	5	5	7	7	8	22	11
Dickinson.....			1	1	1	4	3	5	6	4	2	3	4	1	8	7	2
Davis.....				2	1		3	3	1	3	3	3	4	2	2	26	23
Des Moines.....			1		1	2	3	1	1	8	1	5	2	3	4	19	14
Decatur.....				2		3	2		3	9	4	4	6	2	5	22	18
Delaware.....				4	3	6	4	4	8	8	2	5	11	8	10	5	21
Dubuque.....		1	2	5	1	3	3	6	4	2	4	1	4	8	2	6	
Emmet.....		1	2	3	1	3	3	4	5	6	5	8	4	2	6	9	3
Fayette.....						6	5	10	3	12	10	7	7	11	7	6	16
Floyd.....		1		5	4	3	4	5	9	10	9	5	5	12	5	24	4
Franklin.....			2	2	2	5	4	10	9	10	10	9	6	6	2	24	6
Fremont.....			3		2	2	12	6	9	8	5	9	13	2	9	29	7
Greene.....				3	3	5	4	3	7	13	9	10	4	11	7	17	12
Grundy.....			1		3	4	4	3	5	4	7	10	11	8	5	27	18
Guthrie.....			2	2	3	6	5	6	2	15	10	11	7	11	11	31	13
Hamilton.....			1	1		1	4	7	5	9	12	6	10	6	9	36	23
Hancock.....		1	2	1	2	2	6	8	7	8	7	9	6	6	8	22	10
Hardin.....			1	2	4	3	4	4	7	4	6	5	3	8	6	19	10
Harrison.....				1	4	1	1	4	5	3	3	5	2	5	1	20	11
Henry.....		1		2			11	5	5	7	5	6	4	3	5	15	17
Howard.....			2	3	3	2	7	5	7	5	15	5	5	5	6	23	9
Humboldt.....			1	4	2	5	3	4	9	4	6	10	5	2	9	20	1
Ia.....						1	1	5	2	12	5	13	9	6	2	26	6
Iowa.....				3	3	3	6	6	4	9	14	10	9	6	11	36	18
Jackson.....			1	1	2	1	4	8	7	2	7	2	2	8	8	12	15
Jasper.....		1			2	5	6	7	11	7	14	6	4	5	12	25	10

## COUNTRY SCHOOL STATISTICS.

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TABLE No. IV—CONTINUED.

WINTER TERM 1903-1904.

Number of schools having an average daily attendance of:

County.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 to 20	More than 20
Jefferson .....					1	2	4	1	2	7	9	4	4	8	4	17	25
Johnson .....		1	8	8	8	5	6	11	4	9	6	11	11	7		22	81
Jones .....			8	4	5	5	8	4	9	11	6	6	2	6		32	17
Keokuk .....		2	2	4	2	1	7	5	6	9	7	5	5	12		32	24
Kossuth .....	1	5	8	7	10	21	18	20	26	11	14	15	12	4		24	10
Lee .....		4	1	1	2	4	4	4	2	6	2	4	5	5		14	19
Linn .....			4	5	1	2	4	9	5	8	7	4	9	8		23	37
Louisa .....		1	1	1	8	8	5	6	2	5	8	5	9	7		10	7
Lucas .....					1	1	1	1	2	1	3	2	4	1		20	16
Lyon .....		2	8	2	1	7	8	4	8	6	9	8	5	3		22	9
Madison .....	1		1		1		8	8	5	6	4	5	5	2		25	13
Mahaska .....				1	1	4	2	2	8	4	7	8	7	5		22	18
Marion .....				2		5	8	1	5	5	3	6	7	5		11	17
Marshall .....			2	2	2	9	12	5	9	9	8	7	10	4		24	21
Mills .....				1	2	5	5	6	9	8	6	8	2	8		14	5
Mitchell .....		1	1	8	2	7	2	2	7	4	7	8	8	2		14	8
Monona .....		2	1	10	14	8	6	8	10	5	9	8	7	6		25	8
Monroe .....			1	1	1	8	4	1	4		4	5	6	8		27	26
Montgomery .....		2	2	5	8	1	1	8	10	5	15	6	8	4		14	10
Muscatine .....					1	1	2	8	6		6		8	6		12	17
O'Brien .....	1			1		1	2	5	9	7	14	8	14	6		22	9
Osceola .....				2	1		2	7	8	5	7	9	2	5		12	7
Page .....		2	1	8	8	8	7	6	7	1	7	9	9	7		31	17
Palo Alto .....		1	4	1	8	8	18	7	10	6	7	8	4	2		18	7
Plymouth .....		1	8	2	6	2	12	8	16	5	9	10	8	9		22	5
Pocahontas .....				6	6	8	3	18	6	7	13	11	10	11		19	18
Polk .....				4	8	7	7	6	8	8	5	5	11	9		25	37
Pottawattamie .....			1	4	4	6	5	14	15	18	7	13	5	8		42	23
Poweshiek .....		8	8	8	8	4	6	7	6	9	11	5	7	5		24	6
Ringgold .....	1		4	8	1	5	4	12	6	6	9	1	4	8		31	8
Sac .....		2	1	8	7	6	12	6	9	13	11	6	4	9		26	13
Scott .....				1	3	1	2	1	1	1	4	8	8	1		18	23
Shelby .....			1		4	4	8	8	8		5	13	7	4		21	9
Sioux .....		2	1	5	5	5	6	9	13	8	11	12	10	11		33	15
Story .....				2	2	4	6	7	14	6	7	5	6	8		24	13
Tama .....		2	1	5	8	4	8	7	8	12	13	11	6	12		32	23
Taylor .....			1		1	8	5	8	5	4	4	8	7	6		20	10
Union .....				8	5	8	1	8	5	5	9	9	5	5		30	13
Van Buren .....		1	1	1	1	8	6	8	6	5	7	7	9	8		31	23
Wapello .....					1	3	4	8	4	8	2	6	8	8		10	23
Warren .....			1		4	1		8	6	8	4	8	6	1		23	34
Washington .....		2	1	2	8	7	4	5	11	7	12	12	9	9		35	13
Wayne .....					2	2	6	5	5	6	5	8	1	6		30	18
Webster .....		1	7	2	8	4	14	15	14	18	16	7	7	14		16	31
Winnebago .....			1		2	3	2	7	8	4	8	7	8	9		15	4
Winneshek .....		1		4	2	2	5	4	5	4	7	7	4	6		23	56
Woodbury .....	1		2	6	10	9	13	11	9	13	10	11	8	10		29	19
Worth .....					2	1	5	7	8	6	8	10	6	6		9	13
Wright .....	1				2	5	11	9	8	2	9	9	7	5		23	14
Total .....	2	17	81	106	268	384	445	554	608	604	647	746	651	736	631	2,160	1,457

TABLE No. V.

SPRING TERM, 1904.

Number of schools having an average daily attendance of:

County.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 to 20	More than 20
Andubon .....			2		2	4	2	5	3	5	4	7	6	3	7	41	15
Adams .....				1		3	6	4	5	5	10	4	6	3	9	6	
Adair .....		2	1	1	5	4	6	6	6	18	10	6	10	9	6	22	4
Appanose .....						1	2	3	1	3	2	3	8	2	5	12	19
Alamakee .....					1	2	1	1	3	4	3	2	3	2	8	5	9
Benton .....			2	4	5	4	6	9	14	6	6	11	12	9	4	21	13
Buchanan .....		2			1	4	5	6	12	10	7	13	13	8	4	23	19
Butler .....				5	1	9	7	10	10	20	7	11	6	8	4	21	18
Boone .....			1	1	2	6	7	6	10	5	9	11	11	14	7	22	21
Black Hawk .....				4	4	4	3	4	10	9	7	13	7	9	12	20	13
Buena Vista .....		2	1	2	6	7	5	6	4	5	7	7	7	6	2	9	1
Bremer .....				2	3	4	1	6	5	9	3	6	5	5	2	9	9
Cass .....			2	4	5	5	8	4	8	7	12	5	8	6	3	29	10
Clayton .....			2	3	2	5	2	6	7	5	5	3	13	12	6	21	23
Carroll .....	1	2	4		4	7	4	5	8	10	6	5	5	1	1	10	5
Crawford .....			1	2	5	6	6	5	9	6	10	2	7	4	1	12	3
Calhoun .....				6	5	7	9	3	13	16	11	9	11	7	6	22	6
Cerro Gordo .....		1	5		7	14	8	8	10	4	11	6	9	8	4	15	5
Clay .....	1		1	5	7	6	7	11	9	8	10	8	9	7	6	16	6
Clinton .....				1	3	6	5	11	9	7	6	8	4	6	12	32	9
Cherokee .....			1	3	5	5	10	17	10	8	11	8	6	7	7	17	3
Chickasaw .....				1		2	1	2	1	3	6	2	5	4	3	14	7
Clarke .....			1			6	4	4	5	10	7	8	3	5	4	18	5
Cedar .....			1	3	4	4	8	4	11	11	11	6	10	5	8	32	8
Dallas .....			1	3		2	6	10	8	2	12	6	3	5	8	16	10
Dickinson .....		1	1		5	3	3	6	6	5	4	3	5		1	5	2
Davis .....					1	1	1	2	3	1	4		3		3	12	15
Des Moines .....			1		2	2	4	2	2	2	4	1	3		1	20	12
Decatur .....			1	2		2	5	1	6	3	2	6	5	11	3	12	10
Delaware .....		1	1	2	4	2	2	7	8	14	6	5	9	7	6	22	9
Dubuque .....	1	1	1	2	4	2	3	2	6	4	1	3		2	4	3	8
Emmet .....		3			1	4	1	3		1	3			2	1		
Fayette .....			1	1	1	2	10	6	8	7	6	9	8	2	7	37	20
Floyd .....		1		2	5	8	9	8	5	6	6	10	7	11	6	10	4
Franklin .....			1	3	1	7	5	10	15	11	12	3	6	4	5	16	7
Fremont .....			2	1	2	10	5	9	9	6	7	6	9	4	5	30	5
Greene .....			3	2	6	6	4	5	7	14	10	11	7	6	5	17	8
Grundy .....		1		4	3	8	7	3	11	6	8	10	8	9	7	19	8
Guthrie .....				1		3	8	8	10	10	9	11	11	11	2	29	12
Hamilton .....			1		3	2	3	9	6	12	16	9	16	13	10	25	6
Hancock .....				2	5	8	6	11	6	11	8	6	4	8	9	19	7
Hardin .....			2	1	5	6	5	2	6	10	4	2	6	7	4	14	11
Harrison .....			1			2	1	4	3	3	5	8	5	2	3	12	15
Henry .....				1	5	4	4	4	9	11	5	4	4	5	4	12	10
Howard .....		1			2	2	5	4	7	11	6	8	5	6	6	20	12
Humboldt .....		1	2	4	2	4	5	9	7	6	9	7	5	8	5	11	4
Ida .....			1	1	3	5	8	14	9	10	6	8	7	5	2	19	
Iowa .....			3	2	4	5	6	7	5	10	11	8	10	12	6	15	19
Jackson .....					2	4	4	7	6	4	3	5	4	5	5	16	10
Jasper .....			3	2	2	4	6	8	12	8	10	6	9	4	4	23	11
Jefferson .....				1	1	1	4	5	5	6	2	6	1	1	5	19	21

TABLE No. V—CONTINUED.

SPRING TERM, 1904.

Number of schools having an average daily attendance of:

County.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 to 20	More than 20
Johnson	...	...	...	2	7	8	11	8	5	11	5	7	7	12	4	86	19
Jones	...	1	1	8	4	6	4	7	10	5	11	8	6	5	8	29	23
Keokuk	...	...	...	1	4	4	8	5	7	4	8	6	8	7	8	26	19
Kossuth	...	4	2	4	11	19	28	28	17	10	10	16	15	9	9	20	9
Lee	...	...	1	2	4	2	4	4	...	5	4	6	5	6	4	8	13
Linn	...	1	1	1	8	4	6	5	8	18	9	7	8	7	3	29	35
Louisia	...	...	1	2	2	2	4	1	5	4	7	5	5	5	7	18	11
Lucas	...	...	...	1	...	...	2	4	2	...	4	5	1	4	8	17	7
Lyon	...	1	8	4	8	5	7	10	5	8	6	6	5	7	9	15	4
Madison	1	...	1	1	1	8	8	...	5	4	8	8	6	6	5	19	11
Mahaska	...	...	...	1	6	8	1	8	1	8	4	9	5	5	7	22	21
Marion	1	...	...	...	2	1	2	2	7	8	4	6	8	4	6	18	19
Marshall	...	1	...	1	9	8	5	10	5	15	7	11	11	5	8	23	10
Mills	...	...	...	2	5	2	4	6	2	4	5	8	5	5	4	16	12
Mitchell	...	...	...	1	1	4	4	4	4	4	7	8	7	2	2	15	8
Monona	...	...	8	2	5	8	8	18	15	10	7	7	7	6	5	21	6
Monroe	...	...	...	...	1	4	2	2	1	8	8	4	2	2	8	28	24
Montgomery	...	...	1	2	2	4	11	6	14	11	5	8	2	2	5	12	4
Muscatine	...	...	...	...	2	2	1	5	1	8	8	5	5	...	7	11	18
O'Brien	...	2	...	8	8	7	9	11	12	7	12	18	9	9	5	21	8
Osceola	...	...	...	4	2	8	4	10	6	6	5	6	8	8	3	5	4
Page	...	...	1	1	8	6	1	10	9	8	10	5	5	5	9	27	18
Palo Alto	...	2	1	2	4	6	9	14	18	12	8	8	2	4	2	10	7
Plymouth	...	1	5	8	6	7	18	18	6	16	11	12	8	5	5	19	1
Pocahontas	...	...	1	...	4	5	7	11	11	10	12	9	5	6	5	28	8
Polk	...	...	...	1	2	8	7	1	10	6	6	15	7	14	6	28	30
Pottawattamie	1	...	1	4	6	6	5	7	20	12	17	18	12	9	9	86	15
Poweshiek	...	1	...	2	4	6	8	5	12	8	5	6	5	6	4	28	11
Ringgold	...	...	...	2	5	8	2	7	9	7	6	9	4	6	6	15	7
Sac	...	1	1	1	8	6	10	6	10	9	8	11	18	12	5	21	5
Scott	...	...	...	...	8	1	1	...	5	4	5	2	4	6	4	17	16
Shelby	...	...	...	...	8	1	4	6	4	6	5	7	8	7	6	11	6
Sioux	1	...	...	7	1	12	6	9	9	9	15	18	16	18	3	85	9
Story	...	...	...	1	8	8	8	4	7	8	8	9	9	5	10	19	8
Tama	...	...	8	8	7	5	10	7	8	7	9	5	12	9	7	28	19
Taylor	...	...	1	...	8	2	5	8	1	2	5	10	4	5	4	23	6
Union	...	...	...	3	5	7	5	5	4	7	8	5	7	6	5	15	12
Van Buren	...	...	...	...	...	2	4	2	3	6	5	6	8	6	6	20	15
Wapello	...	1	1	2	2	2	1	3	4	6	6	5	5	5	4	14	38
Warren	...	...	...	1	1	2	7	4	7	5	8	4	7	2	5	19	25
Washington	...	...	1	1	8	7	4	6	5	4	7	8	11	10	7	37	9
Wayne	...	...	...	...	...	2	...	5	2	5	7	9	8	7	7	20	12
Webster	1	...	8	5	6	8	9	18	15	9	9	7	12	10	9	28	18
Winnebago	...	...	...	...	2	3	7	4	5	8	5	8	9	2	6	18	4
Winnechick	...	...	...	...	8	6	5	5	5	5	7	8	4	5	7	28	16
Woodbury	...	...	2	5	7	14	12	14	9	7	18	15	9	4	9	28	10
Worth	...	...	...	...	1	8	8	5	12	4	6	8	5	3	18	14	14
Wright	...	...	1	1	5	6	4	11	4	11	11	9	7	6	6	24	9
Total	9	29	91	170	818	474	531	645	707	705	698	708	690	600	535	1,917	1,114

TABLE

Monthly Salaries Paid Rural Teachers for the School Year 1908-09.

County.	\$20			More than \$20 Less than \$25.			\$25.			More than \$25 Less than \$30.			\$30.		
	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.
Adams	..	..	..	..	..	1	..	1	3	..	1	44	4	30	..
Audubon	..	..	..	..	..	11	..	2	32	9	39	88	15	34	..
Adair	..	..	..	..	..	22	14	11	29	5	21	6	10	32	1
Appanoose	..	1	8	1	22	14	11	29	5	21	6	10	32	1	..
Allamakee	3	1	21	1	..	5	3	4	..	15	1	1	13	1	..
Benton	..	..	1	..	..	12	..	11	21	2	11	40	14	46	..
Buchanan	..	..	..	..	1	15	1	20	85	..	24	32	19	27	..
Boone	1	..	..	..	1	37	..	42	44	5	49	73	27	44	..
Butler	..	..	..	..	..	6	1	3	9	..	19	63	11	36	..
Black Hawk	..	..	..	..	..	13	1	15	26	3	25	73	22	33	..
Buena Vista	..	..	..	..	..	9	1	2	15	7	22	21	30	23	..
Bremer	5	3	20	3	21	13	13	21	11	28	22	1	22	1	..
Chickasaw	3	1	6	..	12	16	2	21	14	13	17	2	27	1	..
Cass	..	..	..	..	..	15	1	7	1	6	24	6	23	..	..
Clayton	18	1	6	2	18	29	1	48	9	20	26	6	80	22	..
Carroll	..	..	..	..	..	..	1	3	10	..	9	24	9	41	..
Crawford	..	..	..	..	..	..	..	..	7	6	12	39	46	41	..
Calhoun	..	..	..	..	..	..	..	..	38	6	26	32	19	41	..
Cerro Gordo	..	..	..	..	1	5	..	2	42	10	22	22	19	30	..
Clay	..	..	..	..	..	1	..	1	25	14	6	22	19	14	..
Clinton	..	..	..	..	..	29	..	1	42	4	26	56	23	74	..
Cherokee	..	..	..	..	..	1	2	3	2	..	1	8	8	3	..
Clarke	1	..	..	..	..	7	5	11	18	7	38	19	38	24	..
Cedar	..	..	..	..	..	11	..	1	38	..	18	65	2	33	..
Dallas	..	..	..	..	..	5	..	2	6	..	4	19	9	23	..
Dickinson	..	..	..	..	..	..	..	..	..	1	8	10	7	..	..
Davis	4	15	1	4	5	19	10	20	10	10	1	17	31	3	..
Des Moines	..	..	..	..	..	6	..	13	2	2	8	21	9	15	..
Decatur	2	1	3	..	11	29	13	41	9	16	10	12	22	8	..
Delaware	7	18	..	12	17	..	40	23	1	23	19	27	21	..	..
Dubuque	4	6	7	3	2	24	9	15	31	9	14	26	15	7	..
Emmet	..	..	..	..	..	..	1	2	2	1	..	2	7	1	..
Fayette	2	1	21	..	24	32	4	23	28	21	46	16	57	21	..
Floyd	..	..	..	..	..	2	..	1	80	14	63	15	29	30	..
Franklin	..	..	1	..	..	1	1	1	15	1	50	40	10	41	..
Fremont	..	..	..	..	..	..	..	..	1	1	1	32	9	4	..
Greene	..	..	..	..	..	5	1	2	13	4	11	24	25	23	..
Grundy	..	..	..	..	..	..	..	..	10	..	10	30	19	23	..
Guthrie	..	..	..	..	..	..	..	..	35	11	23	59	29	43	..
Hamilton	..	..	..	..	..	1	..	..	8	1	6	25	..	31	..
Hancock	..	..	..	..	..	..	..	..	..	..	..	..	..	13	..
Hardin	1	..	..	..	..	2	..	..	4	1	4	24	7	12	..
Harrison	..	..	..	..	..	..	..	..	7	5	..	35	18	22	..
Henry	2	3	9	6	31	2	43	17	1	8	21	15	33	..	..
Howard	..	15	..	7	7	..	5	26	7	51	22	13	20	..	..
Humboldt	..	..	..	..	..	2	..	23	10	25	21	22	26	..	..
Ia	..	..	..	..	..	..	..	..	3	..	1	1	..	..	..
Iowa	..	1	5	1	1	30	1	25	42	2	37	36	6	43	..
Jackson	2	1	14	..	7	32	1	39	11	21	17	4	21	3	..
Jasper	..	..	..	..	..	1	..	..	15	..	15	57	..	23	..

**No. VI.**

**Showing the Number of Schools Taught at the Salaries Named.**

More than \$30 Less than \$35.			\$35.	More than \$35 Less than \$40.			\$40.	More than \$40 Less than \$45.			\$45.	More th'n 45 Less th'n 50			\$50.	More than \$50.		
Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	
17	17	18	28	8	13	1	2	1	2	1	...	...	...	...	...	...	...	
35	32	45	34	38	36	19	8	10	4	...	...	...	...	...	...	...	...	
21	57	24	10	24	19	...	6	...	1	6	1	...	...	...	...	...	...	
7	24	1	4	...	...	...	2	...	1	...	...	...	...	...	...	...	...	
10	2	...	2	...	...	...	1	...	1	...	...	...	...	...	...	...	...	
34	27	28	10	56	17	2	25	2	4	7	...	2	...	1	2	...	...	
48	26	31	13	58	12	...	14	7	17	...	...	...	...	...	...	...	...	
2	36	...	7	35	...	2	8	...	1	1	...	...	...	...	...	...	...	
27	46	31	19	20	26	8	16	9	2	10	...	...	...	...	...	...	...	
2	9	1	7	60	4	2	10	2	19	...	1	...	...	...	...	...	...	
10	12	8	9	9	4	10	2	...	1	...	...	...	...	...	...	...	...	
...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	
46	11	...	2	...	...	...	1	...	1	...	...	...	...	...	...	...	...	
9	49	47	12	16	20	10	38	30	11	...	...	...	...	...	...	...	...	
36	30	8	1	22	...	8	1	...	2	1	...	...	...	...	...	...	...	
15	22	2	2	6	...	...	12	1	8	...	...	...	...	...	...	...	...	
44	56	37	7	4	...	...	...	...	7	1	...	...	...	...	...	...	...	
28	68	43	4	21	15	8	16	16	8	5	...	...	...	...	...	...	...	
33	35	49	20	28	20	9	14	16	1	18	8	...	...	...	...	...	...	
...	21	10	5	41	7	2	21	10	27	...	...	...	...	...	...	...	...	
28	29	27	52	46	62	10	31	10	8	12	12	...	2	8	...	...	...	
15	32	9	2	2	1	...	2	...	1	...	...	...	...	...	...	...	...	
5	1	5	13	18	11	...	65	2	1	36	...	1	1	...	9	1	...	
32	15	37	20	89	24	9	20	12	5	22	5	...	...	...	...	...	...	
16	6	13	12	18	20	1	1	2	4	10	8	1	2	...	...	...	...	
18	12	1	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	
14	8	9	9	15	6	5	4	1	5	11	8	...	8	8	5	2	1	
5	25	...	1	5	...	1	...	...	...	...	...	...	...	...	...	...	...	
4	44	8	17	25	5	...	8	...	...	...	...	...	...	...	...	...	...	
2	16	1	3	1	...	1	...	...	2	1	...	...	...	...	...	...	...	
2	31	5	...	12	2	...	16	...	2	8	8	...	8	...	1	...	...	
2	17	...	2	16	2	1	8	2	1	1	1	1	1	...	...	...	...	
5	59	4	...	2	...	1	8	...	1	1	...	...	...	...	...	...	...	
35	56	38	6	27	8	...	16	...	4	1	6	...	...	...	...	...	...	
44	44	26	23	58	29	1	4	2	14	...	...							
19	12	5	19	21	46	16	27	...	8	16	6	...	...	8	2	4	...	
40	22	41	15	81	18	2	26	3	2	8	...	...	...	...	1	1	1	
15	35	32	24	22	21	4	26	5	...	8	...	...	...	...	...	...	...	
29	30	43	27	42	81	15	20	9	7	25	6	...	4	...	1	5	1	
30	36	43	32	28	24	18	21	28	...	12	8	...	...	...	...	...	...	
25	26	26	8	20	16	10	17	17	4	10	2	...	1	1	2	...	...	
6	8	10	14	26	24	...	8	6	4	5	3	...	...	...	...	...	...	
1	15	1	7	32	8	...	12	...	2	9	...	...	...	...	4	1	...	
16	57	13	...	7	...	...	10	...	2	...	...	...	...	...	...	...	...	
24	52	35	8	11	8	1	6	2	...	...	...	...	...	...	...	...	...	
15	18	19	38	42	51	15	6	6	27	30	22	...	...	...	...	...	...	
4	31	7	6	42	4	...	22	...	...	22	...	...	1	...	...	...	...	
...	18	...	5	12	1	...	1	1	...	5	4	...	...	...	1	...	...	
40	27	34	22	47	2	1	58	1	1	1	...	...	1	1	...	...	...	

TABLE

Monthly Salaries Paid Rural Teachers for the School Year 1908-09.

County.	\$20			More than \$20 Less than \$25			\$25			More than \$25 Less than \$30			\$30		
	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.
Jefferson .....	2	2	1	1	49	1	46	14	8	12	11	27			
Johnson .....			5	2	47	1	36	43	45	38	46	43			
Jones .....			2		15	1	18	40	4	22	18	62			
Keokuk .....	1		3	1	26	2	25	10	5	18	35	24	81		
Kossuth .....								4		39	37	25			
Lee .....	10	2	11	2	3	17	24	28	33	6	8	1	9	20	7
Linn .....			1		18		17	53	5	46	33	8	34		
Louisa .....					8	1	3	5		5	55	3	48		
Lucas .....					7	4	14	6	1	11	23	7	20		
Lyon .....							1	2		3	10	5	11		
Madison .....					11		2	16		15	30	3	44		
Mahaska .....					1		1	11	1	9	51	3	58		
Marion .....		2	3		7	12	3	18	10	6	17	25	12	22	
Marshall .....											10		7		
Mills .....											11		2		
Mitchell .....	1	1			10		10	16		26	15	22	19		
Monona .....								9	1	7	79	59	68		
Monroe .....	1	2	1	1	8	20	4	22	2	7	1	10	28	36	
Montgomery .....					9			18		17	28	4	50		
Muscataine .....			1	1	26	1	9	1		8	19	5	21		
O'Brien .....								2	8	10	5	11	16	11	
Osceola .....										1	6	3	1		
Page .....											38		42		
Palo Alto .....								17	1	26	24	11	26		
Plymouth .....								8	7	9	58	41	57		
Pocahontas .....							1	6	4	1	13	9	29		
Polk .....					1					3	4	3	43		
Pottawattamie .....											10				
Poweshiek .....					12		5	14		7	47	2	48		
Ringgold .....					17		12	25	8	33	38	30	32		
Sac .....					10		9	26	12	26	25	28	19		
Scott .....											2		2		
Shelby .....											16	1	14		
Sioux .....					2		3	1		4	19	16	18		
Story .....								6			31	1	38		
Tama .....					9		4	32	1	7	46	9	67		
Taylor .....					1		1				44		41		
Union .....			16		5	11		12	14	5	14	22	32	26	
Van Buren .....	6	1	8	11	1	17	36	9	43	20	21	7	17	33	2
Wapello .....					4	1	12	2	1	7	22	19	44		
Warren .....		2	10		1	24		31	18		2	21	11	25	
Washington .....					19		7	25		15	69	4	61		
Wayne .....	3	4	7	2	10	34	2	49	9	5	11	12	27	5	
Webster .....					3		3	14	4	13	36	16	30		
Winnebago .....				1	2		4	12	7	4	21	19			
Winneshiek .....		1			5	7		9	6	4	13	19	26		
Woodbury .....										1	49	9	43		
Worth .....							3	14	1	18	10	21	29		
Wright .....					2			13		2	20	7	34		
Total .....	*75	5	*38	199	22	233	962	144	978	1422	452	1305	2718	1625	2784

\* In addition to these footings there were three fall terms and ten spring terms taught

## No. VI—CONTINUED.

Showing the Number of Schools Taught at the Salaries Named.

More than \$30 Less than \$35.	\$35	More than \$35 Less than \$40.	\$40.	More than \$40 Less than \$45.	\$45.	More than \$45 Less than \$50.	\$50.	More than \$50.
Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.	Fall term.	Winter term.	Spring term.
9	10	2	2	84	1	1	11	23
25	30	7	1	86	17	1	5	5
5	21	26	2	41	27	1	8	6
27	8	23	23	18	8	8	5	28
81	101	98	26	38	40	9	17	26
8	1	4	11	6	1	1	1	8
17	38	16	6	55	12	2	18	1
6	11	6	42	7	6	1	17	1
4	6	3	6	2	2	1	8	1
20	32	23	24	29	34	9	7	14
6	17	9	8	49	1	1	3	1
14	4	8	15	63	15	8	4	6
12	22	4	7	18	2	1	8	4
22	1	13	67	22	71	14	25	22
12	6	10	39	22	27	8	14	11
15	2	2	21	2	2	2	2	8
30	32	38	8	34	10	2	2	8
6	7	3	3	30	4	1	5	2
17	34	15	15	40	10	10	5	14
7	2	12	27	16	7	3	18	4
56	50	43	21	21	28	19	21	13
11	8	12	26	44	33	6	9	2
19	5	8	42	56	2	20	4	44
16	24	24	11	7	5	12	6	1
25	24	35	21	23	17	5	11	1
19	53	9	11	16	15	21	30	19
10	7	15	48	49	12	17	13	46
20	22	24	88	74	98	10	15	48
20	14	25	4	12	7	21	8	20
21	50	26	5	27	4	2	5	1
52	33	44	5	29	10	9	14	12
1	1	1	26	1	25	1	1	16
13	7	14	37	40	32	2	1	10
25	36	60	34	45	41	23	44	29
65	5	25	21	46	28	8	21	8
45	49	24	2	32	31	4	35	7
4	17	14	24	31	12	2	8	1
39	36	43	7	20	10	1	1	3
9	34	4	4	1	1	5	4	2
12	15	5	26	14	13	12	10	15
3	17	2	9	45	6	1	1	7
3	13	6	5	56	81	1	13	1
2	27	3	16	1	2	2	1	6
35	46	44	31	64	47	14	34	22
15	25	31	4	18	12	2	2	8
4	36	33	13	2	20	2	2	4
16	13	24	47	64	54	8	4	29
6	32	9	3	23	1	8	8	1
38	37	57	14	83	16	11	26	5
1916	3296	2018	1454	2357	1690	428	1270	514
848	1225	310	18	59	23	41	95	26
4	4	4	2	16	25	17	15	20
14								

In Iowa last year for less than \$30 per month.

TABLE No. VII.

Teachers Tenure in One Room Rural Schools.

County.	Number of schools in which the teacher was employed for the full year.	Number of schools in which 2 different teachers were employed during the year.	Number of schools in which 3 different teachers were employed during the year.	County.	Number of schools in which the teacher was employed for the full year.	Number of schools in which 2 different teachers were employed during the year.	Number of schools in which 3 different teachers were employed during the year.
Andubon .....	26	49	80	Jones .....	42	64	20
Adams .....	18	19	24	Keokuk .....	51	57	16
Adair .....	17	58	40	Kossuth .....	62	86	42
Appanoose .....	22	40	1	Lee .....	41	43	5
Allamakee .....	17	24	2	Linn .....	45	68	24
Benton .....	40	58	80	Louisa .....	28	38	17
Buchanan .....	39	60	34	Lucas .....	12	29	8
Butler .....	15	47	11	Lyon .....	33	40	10
Boone .....	29	83	23	Madison .....	18	34	26
Black Hawk .....	37	58	34	Mahaaka .....	80	40	81
Buena Vista .....	32	30	8	Marion .....	31	39	8
Bremer .....	28	30	16	Marshall .....	37	65	83
Cass .....	28	69	27	Mills .....	41	31	8
Clayton .....	68	52	9	Mitchell .....	28	60	7
Carroll .....	58	20	2	Monona .....	31	66	23
Crawford .....	19	16	19	Monroe .....	40	49	8
Calhoun .....	29	64	38	Montgomery .....	27	55	13
Cerro Gordo .....	48	59	27	Muscataine .....	22	24	18
Clay .....	42	56	21	O'Brien .....	83	44	13
Clinton .....	77	71	6	Osceola .....	24	28	13
Cherokee .....	33	49	39	Page .....	50	59	43
Chickasaw .....	15	20	10	Palo Alto .....	20	40	19
Clarke .....	18	64	9	Plymouth .....	59	45	13
Cedar .....	30	57	15	Pocahontas .....	45	71	15
Dallas .....	28	55	20	Polk .....	58	66	16
Dickinson .....	16	22	1	Pottawattamie .....	49	78	16
Davis .....	49	42	8	Poweshiek .....	23	49	38
Des Moines .....	56	27	6	Ringgold .....	21	52	20
Decatur .....	41	48	8	Sac .....	46	55	20
Delaware .....	46	47	12	Scott .....	29	24	6
Dubuque .....	83	19	2	Shelby .....	26	8	16
Emmet .....	51	18	5	Sioux .....	84	51	17
Fayette .....	37	54	24	Story .....	18	58	31
Floyd .....	34	62	18	Tama .....	58	66	36
Franklin .....	38	75	19	Taylor .....	18	44	12
Fremont .....	28	68	16	Union .....	30	84	26
Greene .....	27	50	37	Van Buren .....	24	56	16
Grundy .....	36	49	18	Wapello .....	8	56	6
Guthrie .....	21	76	43	Warren .....	16	17	21
Hamilton .....	34	63	24	Washington .....	28	74	19
Hancock .....	69	43	6	Wayne .....	35	46	12
Hardin .....	24	41	19	Webster .....	51	20	31
Harrison .....	12	35	15	Winnebago .....	34	28	3
Henry .....	13	56	20	Winneshiek .....	85	48	11
Howard .....	17	56	15	Woodbury .....	42	83	24
Humboldt .....	51	41	8	Worth .....	27	28	6
Ida .....	38	37	25	Wright .....	36	61	22
Iowa .....	46	51	28	Total .....	3,406	4,836	1,808
Jackson .....	44	25	9				
Jasper .....	22	67	38				
Jefferson .....	25	46	21				
Johnson .....	32	67	36				

TABLE No. VIII.

School Tax Levies in Twenty Counties, Showing the Levies in the County Seat and the Average Levies in the Country Districts.

County.	Average Levies for County Excluding Town or City Districts.		County Seat.	Levies in County Seat.	
	Teachers' Fund. Mills.	Contingent Fund. Mills.		Teachers' Fund. Mills.	Contingent Fund. Mills.
Andubon.....	7	2.5	Andubon.....	18.7	7.8
Benton.....	7	2.5	Vinton.....	18.9	7
Buena Vista.....	7.1	2.8	Storm Lake.....	12.6	6.4
Buchanan.....	8.7	2.8	Independence.....	11.8	6.9
Cass.....	7.5	2.8	Atlantic.....	14	10
Cedar.....	4	2.8	Tipton.....	11	4.2
Des Moines.....	10	8	Burlington.....	18	5.8
Fremont.....	8	1	Hamburg.....	20	5
Greene.....	7	3.5	Jefferson.....	18	6
Humboldt.....	7.2	2.7	Sidney.....	21	10
Hancock.....	10.4	3.8	Garner.....	18	7.7
Mitchell.....	6.6	2.1	Osage.....	11.9	4.9
Monroe.....	7.6	1.9	Albia.....	13.2	5.8
Marion.....	10	8	Knoxville.....	15	9
Montgomery.....	6.8	1.7	Red Oak.....	19.3	10.4
Plymouth.....	7.8	2	Le Mars.....	19.3	7.1
Scott.....	7	2	Davenport.....	10.9	6.5
Union.....	8.2	1.6	Creston.....	15	12
Washington.....	8.7	2.2	Washington.....	14.2	4.8
Winnebago.....	6	1.7	Decorah.....	15	6.4

NOTE 1. The average levies in country districts last year, as reported by seventy county superintendents was: Teachers' Fund, 7.9 mills, Contingent Fund, 2.6 mills.

The average levies in 385 towns and cities reporting was: Teachers' Fund, 15.1 mills, Contingent Fund, 6.5 mills.

NOTE 2. For the school year ending September, 1904, there were 9,888 country children enrolled in the graded schools of Iowa towns and cities, the total tuition paid being \$114,537.16.



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# THE COUNTRY SCHOOL PROBLEM.

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## THE COUNTRY SCHOOL PROBLEM IN IOWA.

## AN ADDRESS

*Delivered before the Fiftieth Annual Meeting of the Iowa State Teachers' Association,*

BY

JOHN F. RIGGS.

Superintendent of Public Instruction.

It shall be my purpose in this address to discuss the rural school problem as it is presented in Iowa today. This must not be construed as an admission on my part that all questions pertaining to the graded schools are settled. I pass by this class of schools, not that I think them ideal, or that I believe them to present no problems worthy of serious attention. The graded school has its problems, but in my opinion they are at this moment far less urgent than those presented by the rural school, and this must serve as my excuse for confining my remarks to the conditions and needs of the thousands of one-room country schools, where more than half of the children of the state must receive their elementary schooling which, with most of them, is all the schooling they ever receive.

These country children are in most respects most happily situated. The beauties of nature smile upon them, and her myriad voices call to them in the solitude of field or forest. They have a healthful environment. The example of virtue and honor in the home and in the community is in the main before them. Duties many and continuous await them, and their labor is directed to definite ends. They have time for quiet reflection and opportunities to use their reason and judgment. Their environment is well suited to develop a strong body and an active, vigorous mind. No class of our youth gives greater promise of usefulness. These country children deserve and have a right to demand school privileges in every way equal to those accorded to the children of towns and cities. That the school privileges at present accorded them are not equal to those provided in the graded schools of our town and cities can not be questioned by anyone at all familiar with the facts.

I am not unmindful that there are many country schools superior to some graded schools. Where twenty-five to thirty country boys and girls meet a strong, tactful, resourceful teacher whose heart is in her work, and who is aglow with enthusiasm, there we will find a school worthy the name, and a teacher who is doing a service equal to that of any teacher in a graded school. Every county in Iowa has a few such teachers and a few such schools. But

in a great majority of country schools the conditions are such that superior work is impossible.

What are these conditions?

First, small schools and irregular attendance.

Second, schoolhouses with meager equipment.

Third, teachers often inexperienced and of inadequate scholarship.

Fourth, frequent change of teachers.

Fifth, a school year more than one month less, on the average, than prevails in towns and cities, and no provision for instruction beyond the elementary grades.

Sixth, poor classification.

From reports recently received from secretaries of the rural schools of the state it is shown that last year 65 in every 100 of our rural schools had an average daily attendance during the fall term of 15 or less; 62 in every 100 had a like small attendance during the winter term, and 69 in every 100 had a like small attendance during the spring term.

Or, if we take the number of schools where the average daily attendance was more than 20, we find that during the fall term it was but 15 per cent; during the winter term 16 per cent, and during the spring term 12 per cent of the whole. These figures are based on reports received from 10,019 out of a total of 12,521 rural districts.

Or, looked at in another way, we find the total number of persons between the ages of five and twenty-one years in the 12,521 rural districts of the state to be 382,200, or an average of 30.6 for each school corporation employing but one teacher, while in corporations where a graded school is maintained the number of persons between the ages of five and twenty-one years aggregates 341,166, or an average of 47.2 for each teacher employed in these corporations.

But these figures do not tell the full story of the inequality, for it must be remembered that nearly ten thousand country boys and girls included in the country enumeration are enrolled in the graded schools as tuition pupils, besides many more in the academies and the preparatory departments of colleges. It follows, therefore, that the percentage of enrollment is greater in the graded than the ungraded school, and we know the attendance is much more regular. We assign to the graded school teacher, on the average, very nearly double the number of pupils assigned to the teacher in the country school. The trouble is further aggravated from the fact that, as a rule, the very small school suffers in interest and enthusiasm, and in consequence the percentage of attendance is abnormally low.

Again, the country school suffers in comparison with the average graded school in the matter of equipment. Globe, dictionary, wall maps and a liberal supply of supplementary reading books are seldom missing from the graded school and seldom found in the ungraded school. The schoolhouse itself is often neglected and the schoolroom uninviting.

#### AN ARMY OF INEXPERIENCED TEACHERS.

But the rural school suffers more from inexperienced and poorly prepared teachers than any other one cause. Last year 3,479 certificates were issued in Iowa to persons who have never taught. Out of a total of 22,845 certificates issued by county superintendents, but 3,321 were first-class certificates.

Now it is the very common practice with school boards in our larger towns and cities to require as one of the conditions of election that the applicant hold a first-class certificate, and that she show successful experience as a teacher.

Out of a total of 3,974 teachers employed last year in 134 towns and cities of Iowa, all but 82 were experienced teachers. Five hundred four were graduates of some state normal school; 719 were college or university graduates, and 2,269 were graduates of some academy or private normal school or of a high school maintaining a four-year course. In addition to these teachers employed in the larger towns, there were as many more employed in the other graded schools of the state. A smaller, yet large per cent of these also were, no doubt, trained and experienced teachers. Where were the 19,524 holders of second-grade and third-grade certificates, 3,479 of them without experience? Most of them were employed in the country schools.

I hasten to say that not all teachers in the country districts are with little or no experience and of meager education. Some of our very best teachers labor from choice in the country. And then it often happens that the young teacher, with her first school in a remote country district, does a work of the very highest merit. I am persuaded that much of the teaching done in the one-room country schools will bear favorable comparison with the best teaching in our cities. No teacher who labors in the country need apologize for that fact; neither should she feel that the work given her to do is of any less importance than that undertaken in the more pretentious city position. But after all this is said, the fact remains that a very large per cent of the country teachers are without professional training, that some of them, unfortunately, possess very limited scholarship, and that many of them are immature and inexperienced.

The country school suffers further from the frequent change of teachers. The more than 7,000 teachers employed in the *graded schools* of the state are employed for the full year, beginning with the fall term, and it is the common practice to re-elect the successful ones from year to year. This practice does not prevail in the country. In 4,836 country districts in Iowa last year, two different teachers were employed, and in an additional 1,808 country districts three different teachers were employed to teach the same school at different seasons of the year. This frequent change of teachers results in enormous waste. No school is up to its maximum of efficiency when teachers and pupils are strange. This loss is particularly great in the country school where the classification is less perfect and where the teacher requires considerable time in which to determine the status of the individual pupils as to advancement and as to ability for work. Now if this breaking in process must be gone through with every two or three months, it will readily be seen that the loss to the schools from this cause alone is very great.

And, then, our country boys and girls are not offered school privileges for so many months in the year as is common in the towns and cities. Of the 770 schools in Iowa employing two or more teachers, 31 were in session last year over nine months, 630 were in session nine months, and 109 were in session less than nine months. But in the country districts, out of a total of 10,019 reporting, 1,599 schools were in session last year seven months or less, and of this number 469 were in session but six months; 6,462 were in session more than seven months and less than nine, and but 1,958 were in session

nine months. That is to say 87 per cent of the graded schools of Iowa were in session nine months or over, and 19 per cent of the country schools were in session nine months, and none for a longer period.

#### THE MATTER OF CLASSIFICATION.

Furthermore, the country school loses in comparison with the graded school in the matter of classification. Where all the classes in from six to eight grades must come before one teacher, the periods for recitation must be so short as to impair the efficiency of the recitation; and then the teacher, by giving attention to so large a number of subjects, can not do the effective work that would be possible were her energies centered on the work of a few grades instead of on many. Again, the classes in fully three-fourths of our country schools are exceedingly small, in hundreds of instances containing but one pupil. In such cases all the instruction becomes individual. Such a condition is unfortunate in any school. While individual instruction should have a large place in every school and the enrollment should never be so great as to preclude it, there is yet a value in class instruction that is lost to the pupil who must recite by himself. Children learn from one another. In a class of pupils there is the contact of mind with mind, the spirit of emulation is awakened, the interest is sustained, and advancement is more rapid.

Besides all this, the children of the towns and cities are offered a free high school course of from two to four years, which the country children are denied, unless they pay for it themselves and go away from home to get it. Last year 3,932 children from the country were enrolled as tuition pupils in the grades of our town and city schools, and 5,956 were thus enrolled in the high schools,—a total of 9,888 and these country children paid to the cities in tuition more than \$114,000, nearly the whole of it from their own pockets or the pockets of their parents. The figures I have thus far given in this address will, I believe, convince any unblased mind that, so far as school privileges are concerned, the country child is placed, in comparison with the city child, at a great disadvantage. A smaller per cent of his teachers are trained and experienced; he must suffer the annoyance and loss incident to frequent change of teachers; he loses in social privilege because of the prevalent small school; he often loses the inspiration of numbers in class work; his school year is shorter and he has no high school privileges in his home district. In view of these conditions no one, I think, will deny that we have a country school problem in Iowa.

I can take the time today to discuss but one or two of the questions involved in that problem.

It is my belief that a teacher can do her most effective work with a school of about two dozen well classified pupils. In such a school the classes will be large enough to insure class enthusiasm and the spirit of emulation, and at the same time small enough to afford the teacher opportunities for individual instruction. Many educators would assign to the teacher not less than thirty pupils, and some would make the number forty. Very few, I am sure, would hold that a school of twenty-four too large. But if such there be, certainly when the school is reduced below twenty, no one will be found who will deny that it is too small for the most effective work.

And yet we find in 60 in every 100 rural schools of the state the enrollment for the past school year was 20 or less, and in 85 in every 100 the average daily attendance was 20 or less.

There may be those who consider this condition accidental and liable soon to change. True, the school population in any community varies to some extent from year to year. But it must be remembered that economic forces are at work tending to reduce the rural population of the state in relation to the towns, rather than to increase it, and that these forces have been at work for a generation.

The past thirty years have witnessed a phenomenal growth of cities both in this and in other lands. In America they have also witnessed a marked increase in the size of farms, and a more than corresponding decrease in rural population. For the city has attracted to it the young men and young women by the tens of thousands, while the older people have as a rule remained on the farm. Then, labor-saving machinery has come in to supplant much of the hand labor required a generation ago. It is said that four men with improved machinery can now do the work that formerly required the labor of fourteen men. One of the results is shown in the constantly increasing size of farms. For the twenty years from 1890 to 1900 the average size of farms for the United States as a whole increased 9.8 per cent, while the increase in Iowa for the same period was 14.4 per cent.

For the ten years ending in 1900, Iowa increased in population nearly a third of a million; but the increase was chiefly in the incorporated towns and cities which, in 1900, contained 43.6 per cent of our people,—a gain of 7 per cent in ten years.

#### TEN THOUSAND COUNTRY CHILDREN IN CITY SCHOOLS.

The school population in country districts, already depleted by the operation of economic laws, has been still further reduced, as I have shown, by the attendance of nearly 10,000 country boys and girls in the city schools. And then there is scarcely a town in the state where a first class graded school is maintained but one or more families will be found who have moved to the town from the country for the express purpose of schooling their children.

I trust the time may come when, because of the larger returns from farming, and because of the greater advantages of farm life, farming will become more intensive, the size of farms be reduced and the rural population be increased. But the tendency at the present time is unmistakably in the direction of yet larger farms, and that means that the present status of rural population will suffer little change, and that what change there may be will be in the direction of a further decrease rather than an increase in rural population.

The problem, then, before the small school corporations of the state is whether the little schools are to be continued or whether school district boundaries are to be so changed as to greatly reduce the number of districts. This is a question each community must settle for itself. The legislature may and should remove all hindrances to the consolidation of contiguous districts where such consolidation is desired by the people of the districts in interest. Further than this legislation should not go, for local independence in the control of the school is a fundamental principle in America that we do well to guard.

While, in my judgment, consolidation of schools and transportation of pupils at public expense is the rational solution of the country school problem in Iowa, I want to see this solution applied where conditions demand it through the awakened interest of the people in the welfare of their schools. I have presented and, as I believe, without exaggeration, some of the weaknesses that cripple the efficiency of many of our country schools. A wise and liberal policy on the part of the school boards will remove some of the weaknesses. The schoolhouse may be made attractive, the surroundings made beautiful, the length of the school year increased, and *one* teacher, and she a competent one, employed for the full year. All that is necessary to bring about these results is to raise more money for the support of the school and to expend it wisely.

But some of the weaknesses I have depicted are inherent and will not be soon removed, unless a change is effected that will concentrate the interest and support on a few schools where we now have many. We live in an age of consolidation and co-operation. Your effort united with mine multiplies the power of us both. In this age no man liveth unto himself. The life of the community has extended itself over a wider area than formerly. The rural telephone has helped to widen the community interest. Everything suggests the wisdom of extending the school district borders to embrace several contiguous districts, and in this enlarged district to have one school center uniting the energies of all on a single school in which all are equally interested. I am aware that it is said by many that the country schoolhouse is indispensable as a place of assembly for the people. But anyone familiar with rural life knows that the particular schoolhouse in a group of districts that seems most easy of access to the largest number of people comes to be the natural meeting place for the community, and that meetings, whether religious, educational or political, are held almost invariably in this particular schoolhouse. The territory tributary to this natural center varies. It may include practically the entire township, or it may be much more restricted in extent. But it is seldom co-extensive with the usual small school district. In such a territory the schoolhouse where public meetings are held by common consent constitutes the social center, and there is little need of any other schoolhouse in the same territory, either for school purposes or as a meeting place for the people. This community interest would be greatly strengthened if, instead of the small one-room schoolhouse, an up-to-date building with library and commodious assembly hall should take its place.

#### BENEFIT OF CONSOLIDATED SCHOOLS.

In such a school the social life of the children is widened; the circle of acquaintances is extended; classes are larger, and there is the contact of mind with mind that is absent in the class of one pupil. And, finally, the teacher is permitted to concentrate her energies on a few grades instead of teaching them all; to have comparatively few daily recitations instead of many, and to have twice as much time for the recitation as in the school where the whole range of classes must come before her.

Many people have the impression that consolidation means the abandoning of country schools and the transportation of the children to cities and towns, where they are taken into an entirely different environment. But the

consolidation I am contending for contemplates nothing of the kind. I believe the school environment in the country is, in many ways, superior to that in the city. I want the country school to remain in the country so far as possible, but I want it large enough for the employment of from two to five teachers, and with no teacher in charge of less than twenty-five nor more than thirty pupils. Such a school organization might cost the people less in dollars and cents, but the possible saving in money is not the ground upon which the change is urged. The end of consolidation is to get better schools and to multiply the benefits to the children.

Consolidation commends itself to our favor because it will offer the opportunity for proper classification, of a reasonable number of pupils to the teacher, of regular and punctual attendance, and hence the vast increase to the pupils of the benefits the school can bestow.

The small school serves but few people, and is supplied by the taxes raised on comparatively small amount of property. Neither the public interest nor the financial support is, therefore, likely to be such as to encourage the development of the school. While advancement is noted all around, in every business and in every department of human endeavor, the little country school is likely to conform very closely to the type of school of a past generation. But unite the interests of a larger number of people in the school, and bring to its support the taxes on a larger aggregate of property, and better conditions will be speedily and easily secured.

Union and co-operation alone will make possible the twentieth century school. We may project the nineteenth century school into the twentieth century, but the school that keeps pace with the times and meets the demands of the age must have the interest and financial support of many people and the services of a number of skilled teachers working in co operation. The school of the past generation was concerned chiefly with the intellectual development of the young, and little attention was given to the physical. But educators everywhere are now awakening to the need of manual training.

Hand work, the use of tools, the experimental study of plants and soils will take their place alongside the study of books and add immensely to the interest and practical value of the schools. But it is manifest that this enlarged usefulness can not be easily secured in the little isolated district. Neither is it possible for the school in such a district to be other than extremely elementary. The high school is as much the birthright of the country child as it is of the city child. But it can come to the country child ~~in~~ the country only through consolidation.

Along with the problem of the little school is the vexed teacher problem. I shall not discuss this problem today, only in so far as it is related to consolidation of schools. Were it possible today to gather all the country children of Iowa into consolidated schools, more than 2,000 teachers could be eliminated and no one of those continued be given more than twenty-five pupils to instruct. At the present time county superintendents find it impossible to fill all their schools with competent teachers. It follows, therefore, that if we could dispense with 2,000 of the less competent persons now licensed in order to keep the schools open, there would be an immense gain to the schools.

But as suggested a few moments ago, the initiative in the matter of country school consolidation, if taken at all, must be taken by the people in the local communities. The change, therefore, can not come suddenly. All the difficulties in the way, and there are difficulties, must be carefully weighed, the local conditions in each community consulted, and the benefits of the proposed changes proven to the people beyond dispute before the little districts will be abandoned and the larger school units established. I am glad this power rests with the people, for though changes sorely needed may be delayed, when they come they will be abiding and will have back of them the support of the people and will bespeak intelligent direction by the people.

#### IOWA'S SCHOOL POSSIBILITIES.

But while the realization of the highest possibilities of the country school will doubtless come through consolidation, let no one think that nothing can be done to improve the condition of the school under its present organization. The people in any district with awakened interest in the school can beautify the schoolhouse and grounds, render the schoolroom cheerful and attractive, have school furniture of the best, install a library of choice books, provide maps, globe, dictionary and a liberal supply of supplementary texts; maintain a nine months' school and employ a good teacher; and even without formal consolidation they may unite with the people of other districts in the support of a central room of higher grade, where the advanced pupils from several districts may assemble for the instruction they are now obliged to go to the towns to secure. More money raised for the support of the school will accomplish all this and I believe the people of this commonwealth are so enamored of their schools that additional expense will be willingly incurred if they may but know that the interests of the children demand the further sacrifice and that the revenue provided will be wisely and effectively expended. The average tax levy for school purposes in the towns and cities of Iowa is double the levy for like purposes in the country, the average levy for the teachers' and contingent fund combined being last year 10.5 mills in the country and 21.6 mills in the cities.

Iowa is a state of colossal wealth; her material resources are vast beyond computation; her riches abundant beyond the dream of avarice. A people so abundantly favored as are the people of Iowa can give their children educational advantages unsurpassed if not unequaled by any state of the Union.

Vast as is the amount now raised by voluntary taxation for the support of the public schools, I believe that we are at the threshold of an awakening that will greatly increase this aggregate. With a tax levy in country districts, not equal to that which now obtains in the cities of this state, but 60 or 65 per cent of such levy, country school boards will have a revenue at their disposal that can easily put the country school at the very forefront of educational progress.

No class of American citizens excel the farmers, if indeed they equal them, in intelligence and character; and the farmers' children are, as someone recently said, "the best educational material in all the land." Who may say that these people may not and will not rise to their opportunities and maintain schools in the country equal in duration and in equipment and equal if not superior in efficiency to the best schools now maintained in the cities.

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**PRESENT STATUS OF CONSOLIDATION.**

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## CONSOLIDATION OF SCHOOLS IN IOWA.

A special report recently made by the county superintendents of Iowa gives the following facts concerning consolidation of schools in this state.

For the year ending September, 1904, thirty-five counties had consolidation in some form. In eighteen counties the consolidation was designed to be permanent, while in seventeen it was undertaken as a temporary expedient. In all there were fifty-three permanently consolidated schools reported, and of these eighteen were consolidated within the year. In addition to the permanently consolidated schools, eighty schools were temporarily closed for the year.

Eight hundred and fifty-nine children were transported at public expense and the aggregate amount paid for transportation of pupils was \$14,321.65.

Superintendents answer certain questions as follows:

1. Are the people satisfied with the change?  
Sixteen, "Yes."  
One, "Decidedly yes."  
Seven, "With most, yes."  
One, "No."  
Ten, no answer.
2. What effect has consolidation had on the per cent of pupils enrolled?  
Fifteen, "Enrollment greater."  
One, "No change."  
Eighteen, no answer.
3. What effect on average daily attendance?  
Fifteen, "Average attendance greater."  
One, "No change."  
Eighteen, no answer.
4. What effect on tardiness?  
Sixteen, "Cases of tardiness much less."  
Two, "No change."  
Seventeen, no answer.
5. Has consolidation resulted in lengthening the school year?  
Eleven, "Yes."  
Five, "No change."  
Nineteen, no answer.
6. Are better wages paid in consolidated schools?  
Thirteen, "Yes."  
Six, "No change."  
Sixteen, no answer.

7. What effect has consolidation had on the general efficiency of the school?

Seventeen, "Schools better."

One, "No, change."

Seventeen, no answer.

8. Has consolidation resulted in increasing the cost of maintaining the school?

Nine, "Cost greater by from 2 to 20 per cent."

Three, "Cost same."

Four, "Cost less."

Nineteen, no answer.

The ten superintendents who failed to answer question "1", and twelve of those who did not answer questions "2" to "8" inclusive, have temporary consolidation only. The same is true of the one who gave a negative answer to question "1."

#### CONSOLIDATION AND TRANSPORTATION.

Ry J. C. BENNETT,

Deputy Superintendent Public Instruction.

#### THE LAW.

Section 2773. "It (the school board) may \* \* \* determine the number of schools to be taught, \* \* \* determine the particular school which each child shall attend, and designate the period each school shall be held beyond the time required by law."

Section 2774. " \* \* \* And when there will be a saving of expense, and children will also thereby secure increased advantages, it (the school board) may arrange with any person outside the board for the transportation of any child to and from school in the same or in another corporation, and such expenses shall be paid from the contingent fund."

Section 2806. "The board of each school corporation shall at its regular meeting in March, or at a special meeting called for that purpose between the time designated for such regular meeting and the third Monday in May, estimate the amount required for contingent fund, \* \* \* and such additional sum as may be necessary not exceeding five dollars for each person of school age for transporting children to and from school; \* \* \*"

Section 2776. It (the school board) shall have power to maintain in each district one or more schools of a higher order, for the better instruction of all in the district prepared to pursue such a course of study, and it may establish graded or union schools and determine what branches shall be taught therein, \* \* \* and it may select a person who shall have general supervision of the schools in any district subject to the control of the board."

Section 2799. "Independent districts located contiguous to each other may unite and form one and the same independent district in the manner following: At the written request of any ten legal voters residing in each of said independent districts, or, if there be not ten, then a majority of such voters, their respective boards of directors shall require their secretaries to give at least ten days' notice of the time and place for a meeting of the electors residing in each of such districts, by posting written notices in at least five public places in each of said districts, at which meeting the electors shall vote by ballot for or against a consolidated organization of said independent districts, and, if a majority of the votes cast at the election in each district shall be in favor of uniting said districts, the secretaries shall give similar notice of a meeting of the electors as provided for by law for the organization of independent districts including cities and towns." (See sections 2795 and 2796.)

NOTE—If the proposition carries, it is the duty of the secretaries of the several districts uniting, to determine upon a date and place, and give the usual notices for a meeting of the electors of the newly formed district for the purpose of choosing a board of directors.

In the consolidation of two or more rural independent districts, three directors will be chosen, one to serve until the next annual meeting, one until the second and one until the third annual meeting thereafter.

If the newly formed district contains all or part of a town or city of the second class, five directors shall be chosen, two to serve until the next annual meeting, two until the second and one until the third annual meeting thereafter.

Should the proposed district contain all or a part of a city of the first class or a city under special charter, seven directors shall be chosen, three of whom shall serve until the next annual meeting, two until the second and two until the third. (See sections 2754 and 2795).

Section 2796. "The organization of such independent districts shall be effected on or before the first day of August of the year in which it is attempted, and, when completed, \* \* \* the board of such independent district shall fix the amount of all necessary taxes for school purposes, including schoolhouse taxes, at a meeting called for such purpose at any time before the third Monday of August, which shall be certified to the board of supervisors on or before the first Monday of September, and it shall levy said tax at the same time and in the same manner that other school taxes are required to be levied."

Section 2800. "A township which has been divided into rural independent districts may be erected into a school township by a vote of the electors, to be taken upon the written request of one-third of the legal voters residing in such civil township. Upon presentation of such written request to the township trustees, they shall call a meeting of the electors at the usual place or places of holding the township election, upon giving at least ten days' notice thereof by posting three written notices in each rural independent district in the township, and by publication in a newspaper, if one be published in such township, at which meeting the said electors shall vote by ballot for or against a school township organization. If a majority of the votes cast at such election be in favor of such organization, each rural independent district shall become a subdistrict of the school township, and shall organize as such on the first Monday in March following by the election of a director, notice of which shall be given as in other cases by the secretary of each of the rural independent districts, and the directors so elected shall organize as a board of directors of the school township on the third Monday in March following."

Section 1. Chapter 89, Acts of the Twenty-seventh General Assembly. "When the boundary line between a school township and an independent city or town district is not also the line between civil townships, such boundary may be changed at any time by the concurrence of the boards of directors; but in no case shall a forty acre tract of land, by the government survey, be divided; and such sub-division shall be excluded or included as entire forties. The boundaries of a school township or the independent district may in the same manner be extended to the line between civil townships, even though by such change one of the districts shall be included within and consolidated with the other as a single district."

Section 2802. "When any changes are made in the boundaries of any school corporations, the boards of directors in office at the time shall continue to act until the next regular school election, when the new corporation shall organize by the election of directors in accordance with the new boundaries, whereupon the new boards shall make an equitable division of all assets and liabilities of the corporations affected; and if they can not agree, the matters upon which they differ shall be decided by disinterested arbitrators, one selected by each board having an interest therein, and if the number thus selected is even then one shall be added by the county superintendent, and the decision of the arbitrators shall be made in writing, either party having the right to appeal therefrom to the district court."

#### APPLICATION OF THE LAW.

**SCHOOL TOWNSHIP.**—The school township organization needs no change in order to provide for consolidation of the schools under the law. The first step toward consolidation is for the board to determine that there shall be one school, or a less number than formerly (section 2773), and provide a suitable building.

If sufficient schoolhouse funds are not on hand to erect such a building, it will be necessary to submit to the electors at a regular meeting (sections 2746 and 2749) or at a special

meeting called for that purpose (section 2750) a proposition to vote a schoolhouse tax, or to authorize the board to issue the necessary bonds. (Section 2812.)

When funds have been voted for this purpose, the board may then proceed to select a site and erect a building and make such other arrangements as may be necessary.

The electors may, by petition, compel the board to submit a proposition to the electors at a regular meeting of the corporation. (Section 2749.) The proposition submitted may be simply advisory as, "Shall the district schools be closed and the pupils transported to a central school?" Or the proposition may be to vote a tax or to authorize the board to issue bonds for the purpose of erecting the necessary buildings. The latter plan is preferable, because, if the proposition carries, the necessary funds will be available at once. The ballot should contain the proposition or propositions just as advertised in the notices for the meeting. Underneath each proposition should be a place where the voter may indicate his wish by "yes" or "no." (See also Lloyd township, page 184.)

The board will continue to consist of one member from each sub-district. Should a different number be desired, it may be secured by redistricting. (Section 2801.) Should the number of districts be reduced to one, the board will consist of three members chosen by the electors of the entire corporation. (Section 2752.)

**INDEPENDENT DISTRICTS.**—Should two or more contiguous independent districts desire to unite, it may be accomplished under authority of section 2799. This section applies to the uniting of independent city, town or village districts; rural independent districts; or independent city, town or village districts with rural independent districts. (Opinion by attorney-general, page 133, report 1902.) Township lines are not a bar to the operation of this section.

Independent districts in the same civil township may consolidate by either of two methods as follows:

**First**—If it is not desirable to organize a district so large as the civil township, two or more districts may unite under section 2799. If it is desired to unite all the independent districts in the township, it may be done under the same section; or

**Second**—The rural independent districts in the same civil township may first unite to form a school township (section 2800), after which the process will be the same as indicated under "school township."

It may sometimes be advisable to unite an independent city, town or village district with all or part of a school township, or to unite a school township with all or part of an independent city, town or village district. This may be effected under section 1, chapter 89, acts of the Twenty-seventh General Assembly, provided the boundary between the two districts is not also the boundary of the civil township.

If the boundary of the independent city, town or village district is extended, to include all or a portion of the school township, the resulting district will be an independent city, town or village district; but should the boundary of the school township be extended, the resulting corporation will be a school township. (Opinion attorney-general, page 132, Report 1902.)

## A STUDY OF THREE CONSOLIDATED SCHOOLS.

BY JOHN F. RIGGS,  
Superintendent of Public Instruction.

### I

#### LAKE TOWNSHIP, CLAY COUNTY.

On January 10, 1905, in company with County Superintendent, H. F. Fillmore, I visited the Lake Township central school. The day was very cold, mercury registering ten degrees below zero. Our visit was unannounced and unexpected. We found 98 pupils present out of a total enrollment of 119.

The school is located at the geographical center of the township, and the nearest building of any description is three-fourths of a mile distant. The schoolhouse, erected at a cost of \$3,000, is the only building in the township of a public character, there being no church, hall, shop, or store of any description. This school is in its second year. The children are con-

veyed to and from their homes in eight hacks. Three of these are provided with stoves and the others have blankets and robes. All are completely covered. The average cost per team for transporting pupils is \$28 per month. Two young men attending school are among the drivers.

As one of the direct results of consolidation in Lake township may be mentioned the fact that this winter four miles of excellent gravel road have been made,—the first attempt in that part of Clay county at this class of improvement. The work was mostly done by farmers gratuitously. They expect to continue the work next winter, and it will be but a few years until this township will have excellent roads, and the value of every acre of land in the township will be enhanced thereby. Last year the roads were so bad that transportation was next to impossible for a considerable time, but the people of Lake township have staying qualities, and they are proving the practicability of consolidation in the one township of all others in Clay county most unfavorable for the undertaking.

Church and Sunday school are held in the school building on Sundays and the hacks used to carry the children during the week are used to some extent to carry the people to church on Sunday.

The eight drivers furnish their own teams and hacks, and are under written contract similar to that outlined in the report on Lloyd township.

**The different routes are indicated on the map appearing in this report.**

The first child called for on Route No. 1 must ride 6 miles.									
2	4½								
3	6								
4	6								
5	7								
6	4½								
7	9								
8	6								

The driver for	Route No.	1 receives	\$40.00	per month.
" " " "	" 2	" "	20.00	" "
" " " "	" 3	" "	28.00	" "
" " " "	" 4	" "	80.00	" "
" " " "	" 5	" "	81.00	" "
" " " "	" 6	" "	20.00	" "
" " " "	" 7	" "	80.00	" "
" " " "	" 8	" "	25.00	" "

For purposes of comparison, I give the following table showing enrollment, attendance, etc., in Lake township for the past five years, the first four under the old district plan and the last under the consolidated plan:

Year.	Enrolled.	Average Daily Attendance.	Total Paid Teachers.	Paid for Fuel, Repairs and Janitor.	Months' School.	Average Compensation Teachers.	
						Males.	Females.
1900	126	62	\$1,479.00	\$150.00	8	\$27.12	\$27.45
1901	120	55	1,639.00	120.00	8	.....	29.25
1902	107	64	1,650.00	150.00	8	.....	28.92
1903	96	70	1,102.10	380.00	5.5	23.00	29.00
1904	116	101	803 25*	150.00	8	50.00	37.50

\*The figures given in this table are from the annual reports of the county superintendent of Clay county. Evidently this amount should be \$1,000 if all the orders for the year were paid.

It will be seen from the above table that the average daily attendance was 60 per cent greater last year than the average in the township for the four preceding years.

This year the principal receives \$50 per month and the grade teachers \$40 each per month.

The cost per month of maintaining the Lake township school at present is:

Teachers' salaries.....	\$130. 00
Transportation (8 teams) .....	224. 00
Fuel and janitor service (estimated).....	20. 00
Total.....	\$384. 00

The assessed valuation of the township is \$178,000. On the present basis of cost the levy for teachers' and contingent funds combined for eight months of school would be 17.2 mills.

For the year 1902, when eight months' school was maintained in the seven separate districts, the levy was 10 mills (assuming that the assessed valuation was the same then as now). But for the year 1902, the average daily attendance in the township was but 64, whereas it is now over 100. The people are spending more in dollars and cents, but they are getting more for the money spent.

Pupils are transported this winter from forty-one homes. To each of these homes I sent a letter requesting answers to the following questions:

1. Do you regard the school now being conducted in Lake Township as being better than the school you had previous to the consolidation?
2. When the schools of this township were consolidated did you favor consolidation or oppose it?
3. Are you now in favor or opposed to consolidation in this township?
4. Give reasons for your answer to Question 3.
5. What advantages, if any, have resulted from consolidating the schools of this township?
6. What disadvantages, if any, have resulted from consolidating the schools of this township?

Thirty-two answers were received. Of these twenty-six patrons say the school is better than formerly, most of them say "much better." Fourteen of the thirty-two were opposed to the consolidation at first, and ten are still opposed.

#### THE BENEFITS CLAIMED.

Those favoring the central school were very positive in their opinions.

Mr. J. P. Livingston, a director in the township for eight years, answers the six questions submitted as follows:

1. Yes, far ahead of it.
2. Yes and no, because the roads were not fit.
3. In favor.
4. Better school. Better teachers. Better roads. Children like to go better and advance more in one year than in two the old way. Children go ahead instead of standing still as they oftentimes did the old way. Also better attendance.
5. The roads have become better. Property is worth more and a better feeling all around.

6. It has cost more so far. I don't know of any other disadvantage. Hope the good work may go on.

The following are the principal arguments offered by others in defense of the new way as opposed to the old:

Children attend more regularly.

The pupils are learning better in every respect.

Better attendance.

Bad weather doesn't interfere with attendance.

Inexperienced teachers are eliminated.

Better classification.

Pupils learn more in same length of time, six months in the consolidated school being worth more than nine months in the district school, which means less relative expense.

Pupils have a graded school.

No pupil ever tardy.

Larger classes.

Country children get equal advantages with city children.

Parents know where their children are during the day.

More rivalry for excellence.

No exposure of children to inclement weather.

Better teachers.

Only slight advance in cost, cheaper per pupil considering work done.

Gives teachers time for individual work.

Fits children to enter high schools.

One schoolhouse only to keep up.

Better teachers and fewer of them to pay.

More interest in school work.

Causes improvement of roads.

Children can be educated without being sent to city.

Many go that would not go to district schools, among larger children.

#### THE OBJECTIONS URGED.

Those who still oppose the plan of having but one school in the township, urge the following objections:

"It makes all the school in winter and none in summer and it does not give the small children any advantage. I am also opposed to boys driving the bus. (Two of the young men students drive hacks in this township.) It also makes too long a day, starting at 7 o'clock and not coming home until 6 p. m. The disadvantages of the consolidation are poor roads, and also raising the school tax almost double."

"It is too hard on children from six to ten years of age. Some must start before daylight and do not get home until after dark, and ride ten miles. It makes most of the school in cold weather. About the only advantage is getting a better grade of teachers and it doesn't take as many. It costs too much money for transportation."

"The school is better, but in wet time the scholars can not be transported on account of the bad roads, there is no place for the drivers to stay during the day, the cost is double the district plan and the house is located in a frog

pond. But the scholars never are tardy, they have the benefit of a graded school, and are transported in a warm bus."

"If a good teacher were hired the district school is the best. The graded school is an advantage, but the district is better, figuring expense, and the long ride of pupils. The disadvantage is the great expense."

"I think it is a damage to this township. There are no advantages over the old way. It costs us more."

"It is too far away for little children in severe cold weather. Don't like some of the men they have for drivers."

"Too expensive and too far away from patrons on the out-edge of the township."

"The children are obliged to start about 7 o'clock and do not get home until 5:50. They can not have time to help at home at all when they are going to school."

"It makes taxes one-half higher. I opposed it for the reason that I am not located right. My children leave home at 7:15 to 7:30 a. m. and do not get back till 5:40 to 6:00 p. m."

## II

### LLOYD TOWNSHIP, DICKINSON COUNTY.

The board of directors of the school township of Lloyd submitted the following proposition to the electors at the annual meeting March 11, 1901:

#### PROPOSITION TO VOTE ON SCHOOL HOUSE TAX.

Notice to Voters: For an affirmative vote upon the following proposition, write the word yes in the square. For a negative vote write the word no in the square.

Shall a school house tax of ten mills on the dollar be voted and levied in the school township of Lloyd, in the county of Dickinson, State of Iowa, the same to be used for a school of higher order, or a graded school to be located at Terril, Iowa.



On this proposition 65 men and 8 women voted "Yes," and 37 men voted "No."

A site containing two acres was donated, and a four-room schoolhouse erected just outside the corporate limits of the village of Terril. The building cost \$4,000 and was completed and school opened in October, 1901. The old organization prevails whereby a subdirector is chosen annually in each of the eight (former) subdistricts, and one director chosen from the township at large, making a board of nine members. The people prefer this form of organization, because it insures representation on the board from every part of the township.

The board employs seven men with teams to transport the pupils to and from school. Each driver enters into a written contract whereby he agrees: "To furnish a strong, safe, properly covered vehicle, with comfortable

seats, and a safe, strong, quiet team, with proper harness, all being subject to the approval of the board; to furnish warm, comfortable robes or blankets sufficient for the best protection and comfort for each and all the pupils to and from the public school building and their respective homes; to collect all the pupils on the route by driving to each and all the homes where pupils reside each morning that school is in session in time to convey the pupils to school, so as to arrive at the school building not later than 8:50 a.m. and return the pupils to their homes, leaving the building at 4:00 p.m.; to personally drive and manage his team, and to refrain from the use of any profane or vulgar language within the hearing or presence of the children; nor will he use tobacco in any form during the time he is conveying the children to and from school. He agrees that he will not drive faster than a trot, nor race with any team, and that he will keep order and report improper conduct on the part of pupils to the Principal or the President of the board."

During the life of the contract the board retains one-half of the previous month's wages of each driver to insure the faithful performance of the contract.

The different routes are indicated on the map, appearing in this report.

The first child called for on Route No. 1 must ride 8 miles.

"	"	"	No. 2	"	5½	"
"	"	"	No. 3	"	6	"
"	"	"	No. 4	"	8½	"
"	"	"	No. 5	"	7	"
"	"	"	No. 6	"	6	"
"	"	"	No. 7	"	5½	"

The driver for Route No. 1 receives \$40 per month.

"	"	"	No. 2	"	33	"
"	"	"	No. 3	"	35	"
"	"	"	No. 4	"	40	"
"	"	"	No. 5	"	42	"
"	"	"	No. 6	"	34	"
"	"	"	No. 7	"	30	"

This school is now in its fourth year under the consolidated organization. For purposes of comparison, I give the following averages for the last three years under the old district plan and the first three years under consolidation.

For the years 1899, 1900 and 1901, the

Average enrollment per year.....	155
Average daily attendance per year.....	78
Average paid teachers per year.....	\$1,510.00
Average paid for fuel, janitor service and repairs.....	498.85
Average number of months per year.....	7
Average compensation of teachers per month, males.....	80.33
Average compensation of teachers per month, females.....	80.50

For the years of 1902, 1903 and 1904, the

Average enrollment per year.....	192
Average daily attendance per year.....	118
Average paid teachers per year.....	\$1,579.00
Average paid for fuel, janitor service and repairs.....	277.00
Average number of months per year.....	8
Average compensation of teachers per month, males.....	76.66
Average compensation of teachers per month, females.....	40.00

The average cost of tuition per pupil per month for the last three years under the district plan (based on the amount paid teachers plus amount paid for fuel and janitor service) was \$3.57. The average cost of tuition per pupil per month for the first three years under consolidation (assuming that the cost for transportation has been uniformly \$254 per month,—the amount now paid). was \$4.12.

While the consolidated school is costing the people more money in the aggregate, they are getting far more for their money. The school year has been increased one month, the average daily attendance has increased 51 per cent, the school is well classified, two grades of high school work are offered, trained teachers are employed, and the pupils are all interested in their work.

I visited this school, unannounced, on the 11th day of January, 1905. The weather was severe and a storm was raging. One hundred and twenty-four pupils were in their places, eighty-five of them from the country and thirty-nine from the village of Terril. The work of the pupils was as good as is usually found in city schools. Most of the teaching was excellent. The principal receives this year \$80 per month, and the grade teachers \$45 each per month. Among the songs the children sang during the opening exercises was one entitled "Uncle Sam is Rich Enough to Send Us All to School", and they sang with "the spirit and understanding."

The cost per month of maintaining the Lloyd Township school at present is

Teachers' salaries.....	\$ 215
Transportation (seven teams).....	254
Fuel and janitor service (estimated).....	25
Total.....	\$ 494

The assessed valuation of the property in the township is \$280,000. On the present basis of cost the levy for teachers' and contingent funds combined would be 14 mills.

The answers to questions sent to the patrons of this school who live outside of the town of Terril show that the people of the township are in general heartily in favor of the present school organization as opposed to the old. Reports were received from the heads of twenty-seven families. Of these twenty-three are unqualifiedly in favor of the new way and four are in whole or in part opposed, as indicated by the following answers:

No. 1. "The school is not better than the district school—not for farmers. I am opposed, because the children have to ride from six to seven miles in all kinds of weather before they can get to school, and the bus on this route is not fit to haul children in. No advantages have resulted from consolidation in this township."

No. 2. "I consider the school much better. In part, I am in favor of the present plan. But being situated at the farthest distance from school, we find it difficult to keep the small children comfortably warm in severe cold weather, while the older ones suffer some. The greatest fault I find is in the long hours the children are from home on the road and at school."

No. 3. "The school is better, children learn more and come nearly every day. But I am against consolidation in this township. We can levy but \$2,200 for contingent fund and eight months will cost that fund \$3,200 at

least, so we are \$1,000 short. Seven wagons are now required. If all parts were settled it would take twelve."

No. 4. "The school is quite a bit better. Children have learned more, because they can afford to keep better teachers. I opposed consolidation when it was effected. In some ways I am now in favor and others not. The books have to be changed so often and the children must be on the road so long. They are apt to catch all kinds of sickness."

Of the other twenty-four reporting, *all*, without any reservations, favor the present plan. In answer to the question: "What disadvantages have resulted from consolidation in Lloyd Township?" eighteen say "not any," one adding: "And I recommend it to every township in the state of Iowa."

One says the only disadvantage is that "people on the outcorners of the township have to send their children out so early in the morning to get them to school." Another says it is a disadvantage "when the roads are bad and the taxes may be a little higher."

The reasons given in these replies for favoring the new plan are, in brief, as follows:

Can afford better teachers.

Pupils make better headway.

Our children can graduate at home instead of our having to send them away to high school.

School taught by instructors who know how to teach.

By transporting children, the little ones can attend now where they could not under the old plan.

Children attend more regularly.

Children graded in classes and take more interest in their studies.

More children attend.

Gives pupils all over the township the same advantages and has given all the advantage of better schools.

Pupils not exposed to the cold and storms.

Teachers are first class and are hired for the full year.

"Was opposed to consolidation. Now in favor of it. My children can ride five miles better than they could walk one."

People take more interest in the roads and look after the bad places.

### III.

#### BUFFALO TOWNSHIP, WINNEBAGO COUNTY.

In the year 1895 the people of this township voted to form an independent district embracing the entire civil township, six miles square, and voted bonds running for a period of ten years for the purpose of erecting an eight-room building.

The board, which consists of five members, is chosen on the second Monday in March by the qualified electors, and is governed by the same provisions of law which apply to independent districts.

At first the country schools were maintained as formerly, but in August, 1897, the board arranged for the transportation of children in three districts. A year later the board, upon petition, arranged for the transportation of children from another ward and, in 1899, ordered all the rural schools in the

district closed, except those in the extreme northeastern and southeastern parts of the township. This arrangement continued till January, 1904, when one of the country schools formerly closed was reopened, with a membership of twenty-five pupils.

At the present time the district maintains eight rooms in the town of Buffalo Center and three in the remote parts of the district.

The central school is located only one mile from the western boundary line of the district, thus making it impracticable to transport pupils from the remote portions of the township.

The enrollment in the Buffalo Center School this year is 269. Of these 71 are from the country and are transported in 5 hacks. Drivers in this township receive on the average \$38 per month.

The taxable valuation of property in the township is \$349,901. Of this amount the sum of \$125,239 is credited to the incorporated town of Buffalo Center and \$224,662 to the remainder of the township. The present levy for teachers' and contingent funds combined is 22.1 mills.

It will be seen that this organization differs from that of the two just considered, since three one-room country schools are maintained in the remote parts of the township and the management of these schools is under the control of a board, a majority of whose members live in the town or immediate vicinity of Buffalo Center.

From replies received from this township, many of the people are apparently indifferent as to a choice between the old district plan and the present plan. One patron, with a suggestion of sarcasm, says: "It has given us the great privilege of furnishing 45 per cent of the pupils and of paying 65 per cent of the cost of the school, and having two of the five directors out in the country."

Another patron says no advantage has resulted from consolidation and adds: "The small children can't go to school in hard weather." However, a majority of the replies received from this township are favorable to the present plan, all but three saying they regard the Buffalo Center school far better than the one-room district school, and one adding: "For the town it is better, but not for the country." This patron who is strongly opposed to the present plan says: "I think 80 per cent of the children in the country quit school as soon as the law will allow them, as they can not attend school more than four or five months a year and they get so far behind the town children they are ashamed to attend town school." He also suggests that the hack service is not satisfactory.

Patrons who favor the present plan advance practically the same arguments that were offered in defense of the Lake township and Lloyd township schools.

Most of the arguments advanced by the opponents to consolidation in Buffalo township are not so much arguments against this form of school organization, as against the way in which it is applied locally. If the country children are permitted by their parents to attend school but four or five months in the year, the parents are derelict of their duty toward their children and must bear much of the blame. If the grading in the Buffalo Center school is so devoid of flexibility that the less favored pupils can not be reasonably classified, the management of the school should modify the grading in a way to meet the needs of these pupils, as well as the more

avored. If children suffer from cold, or are unprotected in the storms, the fault is with the board in not providing the best facilities for transporting pupils. Wagons designed and built specially for this service and owned by the district would entirely remove this objection. But with the consolidated school two miles from the center of the district, it is impossible that all the difficulties can be removed that are met with in this particular district, which maintains, nevertheless, a good school with high school advantages free to every child in the township.

#### CONCLUSIONS.

From personal inspection and study of some of the consolidated schools in this state, supplemented by the study of reports from other states where the system has been longer in operation and is much more general, I reach the following conclusions:

1. Pupils in consolidated schools very generally enjoy better school privileges and are taught by better teachers than under the old district plan.

2. Where transportation is provided for all pupils the cost of maintenance is usually but not always more than under the district plan, but the enrollment is so much larger and the attendance so much more regular that the increased benefits equal or outrun the increased cost of maintenance.

3. Where consolidation is successfully established, the opposition at first engendered gradually disappears and bitter opponents often come to be ardent supporters of the new plan when they see the superior benefits it secures to the children.

4. Where transportation is made the fixed policy in any district, wagons specially designed for transportation purposes should be owned by the district. This will result in the greater comfort of the children and make it easier for the board to secure competent drivers,—a matter of the greatest importance.

5. Children should seldom, if ever, be required to ride a greater distance than five miles. The very long rides are both expensive to the district and hard on the children. It follows from this conclusion that the civil township is, in general, too large a unit for a school district maintaining but one school. The law should authorize the change of boundaries between contiguous school townships or between school townships and independent districts in such a way that consolidated districts of smaller area than the civil township could be established. The size and outline of the consolidated district should be determined by the physical features of its area and by the location of the homes to be accommodated. The homes on opposite sides of a public highway should be in the same district; hence half section lines or quarter section lines, rather than section lines, should in the main separate school districts.

While an area somewhat smaller than the civil township is preferable as a permanent school unit, *township* consolidation is practicable where the roads are good and the schools are small.

6. The consolidated school should in the main be kept in the country or in the small country village. The school should be the social center of the community. Where one or more country districts are consolidated with a city district, the course of study should be made sufficiently flexible to pro-

vide for the classification, without loss, of those pupils who can attend school only during the winter months.

7. The need of consolidation should appeal most strongly to the people of the many districts where the children are so few that an *efficient* school can not be maintained. There is an urgent need of consolidating such districts. The need is less urgent in districts where a good attendance can be maintained, for a district school with a good enrollment and an efficient teacher may be an excellent school.

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#### ALBION CONSOLIDATED SCHOOL.

The principal of this school, Mr. James H. Dutton, gives the following statement under date of January 11, 1905:

Fifty-one children are being transported this year to the Albion school. Three teams are used to transport them. The drivers furnish their own teams and conveyances, and are paid \$30 per month for their services. The hacks are comfortable, being warmed in severe weather by means of oil stoves. Selection of drivers is made by the school board who first consult the patrons as to their choice of applicants. Obtaining good drivers is a matter of no difficulty here.

Six teachers are required in the consolidated school. If we did not have consolidation, three would be required in Albion, and three in the country districts.

The patrons after a fair trial are generally well satisfied and know they have much better school privileges than under the old organization. We have fourteen more in the high school this year than last. A number have entered school who would not be here but for the superior advantages afforded. Ten pupils from outside the consolidated district are paying tuition in the high school.

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#### MARATHON CONSOLIDATED SCHOOL.

This district is composed of what was formerly the independent district of Marathon and five subdistricts of the school township of Poland. The district contains  $2\frac{1}{4}$  sections. Three subdistricts remain under the old township organization which has no organic connection with the Marathon consolidated district.

In 1903 a school building was erected in this district at a cost of \$20,000, and the school under the new organization opened November 9, 1903. At the present time there are 268 pupils enrolled, 111 of them from the country and 157 from the town of Marathon. Five teams are required to transport pupils. Drivers furnish their own conveyances and receive an average compensation of \$34.25 per month.

Before consolidation six teachers were required in Marathon and five in the country schools since abandoned. Eight teachers are now required in the consolidated school. It has thus been possible to eliminate three teachers. The saving of the salary of three teachers and the saving in fuel

and repairs incident to closing five buildings will very nearly pay for the transportation of the pupils, who now have access to an excellent school offering high school privileges.

### CONSOLIDATION IN INDIANA.

From a report recently issued by State Superintendent Fassett A. Cotton, of Indiana, it is shown that 783 district schools have been abandoned in that state, and 5,396 children transported to central schools. For this service 378 teams are required at an average cost of \$1.60 per day or \$32 per school month.

From a detailed report on consolidation in Lagrange county, Indiana, for the school year 1903-1904, it is shown that consolidation has been effected in eight of the eleven townships. The county superintendent, H. S. Gilhams, furnishes the following statement:

1. The drivers carry watches and consult them while on the route.
2. Each driver keeps the time of the consolidated school, generally standard.
3. The rate of speed while on the route averages five miles per hour for the year.
4. The time of arrival varies from ten to fifteen minutes prior to the opening of the school.
5. The more remote pupils ride about five miles and 60 per cent ride three miles or less.
6. Children are kept comfortable by stoves, patent heaters, blankets and soap stones.
7. The greatest advantage to the service is township ownership of hacks and the improvement of roads.
8. The drivers exercise due responsibility in promptly and safely conveying the children to school and returning them to their homes. They also, by contract, prohibit questionable language, undue familiarity and boisterous conduct in or about the hacks.
9. Eighty-five (85) per cent of the patrons have reported the consolidated school as their preference in comparison with the "old way."

The following statement of gains and losses due to consolidation in this county is also given:

Number of schools receiving conveyed pupils.....	14	
Number of schools abandoned.....	88	
Additional teachers required in the central schools ....	7	
Saving in number of teachers.....	31	
Saving in salaries of teachers.....		\$10,651.60
Saving in fuel and repairs.....		2,280.00
<b>Total saving.....</b>		<b>\$12,931.60</b>
Number of pupils conveyed.....	428	
Number of hacks required .....	29	
<b>Total cost for transportation for the year.....</b>		<b>6,176.86</b>
<b>Net saving, not counting additional cost of fuel and janitor service in consolidated schools.....</b>		<b>\$ 6,754.74</b>

## TUITION PUPILS IN THE GRADED SCHOOLS.

There are 770 graded schools in Iowa. Of this number 544 had, last year, tuition pupils from country districts either in the grades or high schools or both. The aggregate number of tuition pupils with the amount received by graded schools for tuition for the year ending September 1, 1904, is as follows:

	Boys.	Girls.	Total.
Tuition pupils below ninth grade .....	2,022	1,910	3,932
Tuition pupils in grades nine to twelve, inclusive .....	2,701	3,255	5,956
Total number tuition pupils in all grades .....	4,723	5,165	9,888

Tuition received below ninth grade .....	\$ 34,579.14
Tuition received in high school grades .....	79,953.02
Total tuition received .....	\$114,532.16

	Mills.
Tax levy for school purposes in cities and towns (on basis of 383 reports)—	
Teachers' fund .....	15.1
Contingent fund .....	6.5
Tax levy for school purposes in country districts (on basis of averages reported from 70 counties)—	
Teachers' fund .....	7.9
Contingent fund .....	2.6

## TEACHERS EMPLOYED

in the 134 towns and cities of Iowa, having a population of 1,500 or over.

Total number employed .....	3,974
Number who are graduates of the Iowa State Normal School .....	867
Number who are graduates of other state normal schools .....	136
Number who are graduates of some college or university .....	719
Number who are graduates of academies, private normal schools or high schools maintaining a four-year course .....	2,369
Total who are graduates .....	3,491
Number with no experience .....	82
Number who hold state certificates or life diplomas .....	553

## EDUCATION OF THE FARM BOY AND GIRL.

\* \* \* Have the advantages for the education of the farm boy and girl kept pace with the advancement in all other lines of society? Is the little schoolhouse, with its poor equipment, with the poorly trained teacher in many instances, and with very poor work in the common branches sufficient to meet the demands of today for the common school education?

Have we not reached the period in all the central western states where nothing short of a well equipped schoolhouse, a first-class teacher and a course of study revised to meet the demands of the times, are a necessity for our children?

I believe that every farmer who reads this article will agree with me that conditions have changed since he was a boy, and that it takes a better trained mind to be a successful farmer or business man today than it did even ten years ago.

It is safe to say that the time has come when the farmer must have within comparatively easy reach of his home a well constructed schoolhouse, thoroughly equipped for giving the best of modern education. He ought not to have to send his son or daughter away from home to school until at least two years of the work of the modern high school has been completed. The farm boy and the farm girl should be at home at nights while they are getting their general education. These conveniences may be had everywhere by the consolidation of schools in localities of mutual interests. This has already been done to a large extent in Indiana, and the plan is under good headway in Iowa and some other western states.

There is no reason why the farmers should not provide these conveniences of education for their children. It is nothing more than they are doing to provide themselves with better means of breeding and handling their stock or improving their farms, and certainly their children's welfare is of much more concern than any farm or stock improvements. \* \* \*

The new conditions of life on the farm demand improvement in general education for the farm boy or girl. It is presumed that the course of study will contain a good course in bookkeeping, and facilities should be provided for a certain amount of industrial work. The children in the grades should be taught to make various articles, such as cardboard modeling, clay modeling, weaving of rugs and hammocks, baskets with raffia, reed and willow, doll houses with raffia furniture and various articles that may be easily made under the direction of a trained teacher, and both the children of the grades and the high school should have access to a shop where they may learn to make articles by the use of simple tools. This work is not to be carried on with the idea of making carpenters or artisans of all, but with the thought in view of cultivating a desire and an appreciation for such work and the further idea of giving the pupils the opportunity to acquire the ability to help themselves and thereby to help others. A few hours a week at such work as this will prove invaluable to any child. Parents have not come to the realization yet how much this industrial work means to their children. The expense of providing this equipment is nominal, compared to the good to be received, and the pupils need very little instruction in order to acquire the training it is intended they shall secure from such work. \* \* \*

\* \* \* The proper education of the farm boy and girl can not be neglected

without bringing ruin upon the farming communities. If these advantages are not provided the farm boys and girls will drift away early into other callings. If the right kind of schools are provided for the country boys and girls they will remain at home until they receive this general education, and then if they have gifts in other directions it will be time for them to seek special schools.—*Pres. O. H. Longwell in Twentieth Century Farmer.*

#### A NEW ARGUMENT.

The arguments commonly advanced for the township consolidation of rural schools are, first, the increase in the efficiency of the teaching, second, the economy in financial expenditures for the support of the schools. A third argument which we have not heard advanced is the increase, without extra expense, of the size of the school grounds, which, considered in the light of fifty or a hundred years hence, is as potent an argument for rural consolidation as either of the first two.

The instituting and observing of Arbor day the past few years has suggested the idea of preserving the native woods of, for instance Iowa, by planting on school grounds all trees and shrubs that are indigenous to Iowa soil. This, to be effective would require larger plats of ground than at present is set off for school purposes. No rural school plat should contain less than ten acres of ground, which should be set out, in large part, in the form of small groves each containing trees of a kind; there being as many small groves as there are trees indigenous to the soil. What an ideal for a school environment, where the pupils have an opportunity to commune with nature direct, and under conditions best fitted to stir the proper emotions of the soul and inspire to higher thoughts and aspirations! And yet how feasible and easy of attainment, while land is comparatively inexpensive, especially by consolidating the eight or nine districts of a township into one, and appropriating the amount of ground to the one district, that is already appropriated to the nine. Now is the time to inaugurate such a movement. One hundred dollars an acre for such a purpose would be economically spent. The time is coming in the future when America shall have reached the density of population, already attained in some of our European states, when land will have risen to such a value as to prohibit such a proposition as presented above.

County Superintendent Cole, of Cerro Gordo county, asks in the November number of the *Midland* schools, the question, "Would the migration to the city be so great if our rural pupils were offered that which would develop and make them intelligent and scientific farmers, thereby making rural life more attractive?"—A very pertinent question.—*Union County Public Schools.*

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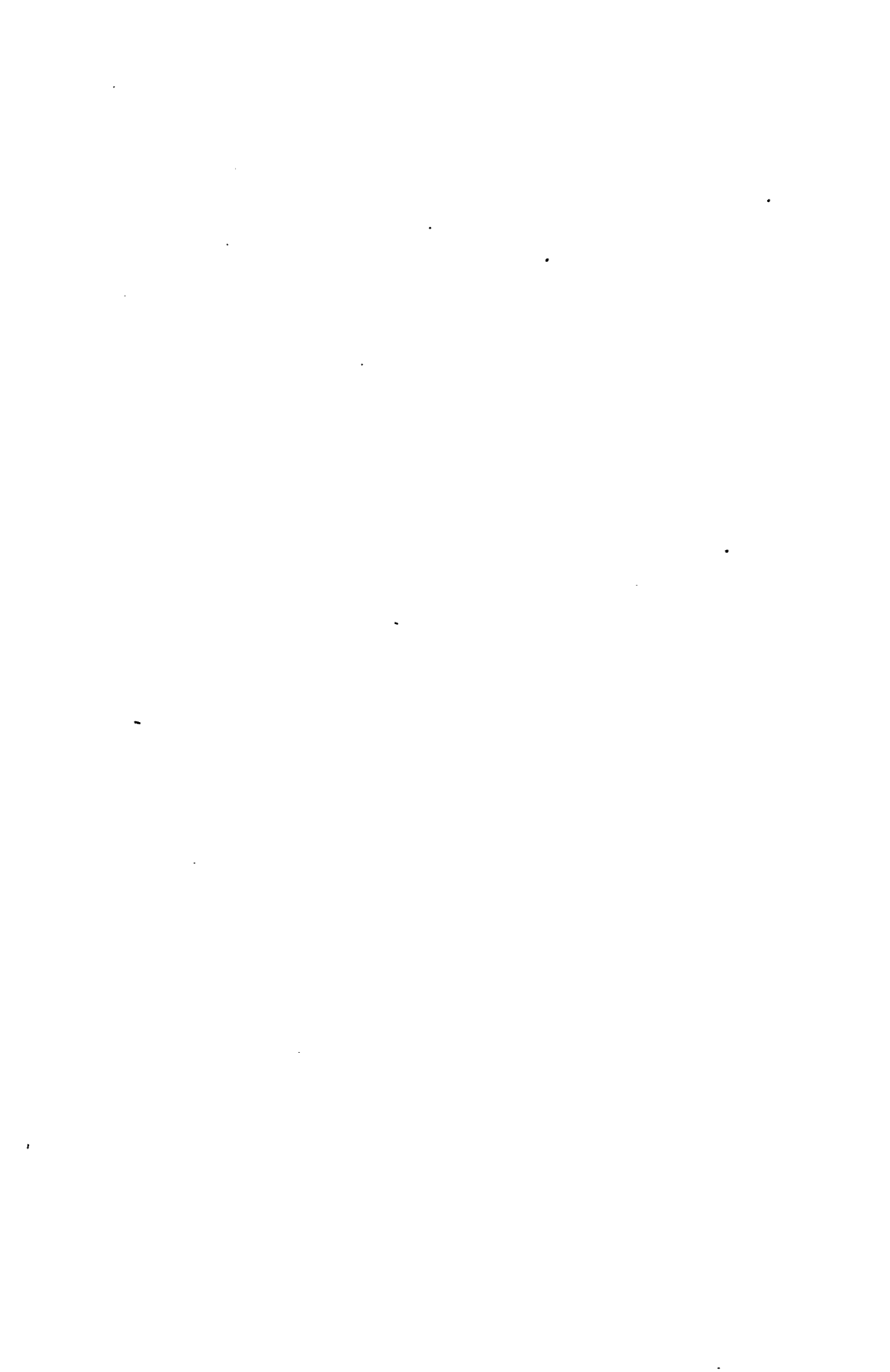
# One Phase of the Teacher Problem

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The Greatest Need of Any School is  
a Trained and Competent Teacher.

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## THE LICENSING OF TEACHERS

Address,

*Delivered before N. E. Iowa Teachers' Association Dubuque, Oct. 22, 1904.*

by

JOHN F. RIGGS.

Superintendent of Public Instruction.

I have a purpose in discussing at this time the hackneyed subject of teachers' examinations. In a little more than a year from now the Thirty-first General Assembly of Iowa will meet. At that time some important school legislation will be urged, and doubtless one of the most important measures will relate to the examination of teachers. But all efforts looking to the change of our laws on this important subject will be utterly futile unless the strong teachers in the ranks, and the county and city superintendents of the state give earnest support to the measures which may be brought forward.

I am, therefore, discussing this year in the four district meetings of the state the question of licensing teachers in the hope that the leading teachers who attend these meetings may be set to thinking on this subject long enough in advance to have well-grounded convictions when our legislators shall again meet in general assembly; and if you shall come to agree with me that radical changes in our system are needed, I ask earnestly that you make known your views on this subject to the men who may represent you in the next general assembly, and that you use your influence in creating a public sentiment in favor of the changes proposed.

I am of the opinion that we now have much needless examination of teachers. I am also of the opinion that, by some hook or crook, a great many persons secure certificates who never, in their lives, passed a satisfactory examination.

The theory of our law requiring teachers to hold a county or state certificate showing qualification is, that without the barrier of an examination, incompetent persons would occupy the teacher's office. In so far then as incompetent persons secure certificates despite this barrier, the purpose of the law is defeated; and, in so far as competent teachers are re-examined simply because the law permits or requires it, no benefit results, but a needless burden is imposed upon the teachers.

If none but the scholarly and well prepared were to seek positions as teachers we might abandon examinations altogether and have free teaching, i. e., teaching without certificates. But with the conditions as we have them—with multitudes of the illy prepared clamoring to enter the teachers' ranks—examinations become a necessity. But, they are a necessity only for those whose scholarship and general fitness for the teachers' office are not

fully determined. That is to say, after a teacher by an honest entrance examination demonstrates that she possesses adequate scholarship, and then by practical experience in teaching demonstrates her ability to govern and instruct youth and is withal a student and actively interested in the educational movements of her city or county, there is little reason for calling her before the county superintendent once a year to find out whether she has forgotten anything or has learned anything new.

I have a very high opinion of the integrity and ability of the county superintendents of Iowa. There is, doubtless, not one of them who does not earnestly desire to deal justly with every applicant and to issue certificates to those candidates only who are fully prepared for the work of teaching. But the superintendent who attempts to adhere strictly to a high and uniform standard is so beset by friends of illy prepared candidates that official life becomes a burden and under the pressure it would not be surprising if the less resolute should stifle convictions and yield at this point and that, and thus subject the schools to the rule of immaturity and inefficiency.

Former State Superintendent Harvey of Wisconsin in one of his excellent reports says that 90 per cent of the county superintendents of that state, in the year 1900, bore testimony to the fact that they were unable to limit the issue of certificates to people whom they believed to be thoroughly qualified for the work of teaching; that they were beset by political influence demanding that certificates be issued to friends and relatives of the political supporters of this officer without reference to qualifications.

Wisconsin is not Iowa, but if this condition existed in 90 per cent of the counties in Wisconsin in 1900, may it not exist to some extent in some of the counties of Iowa in 1904. I contend that it is both impolitic and unjust to subject the county superintendent to this tremendous pressure.

It is evident to any one familiar with the facts that the standard in some counties is very much higher than in others. We may now have ninety-nine standards in this state, and the standard in any county may be changed whenever a new superintendent is installed in office. And the law recognizes this in that it does not permit any recognition in one county of a certificate issued in another county. It is not even permissible under our law, as it is interpreted by the attorney-general, to have an examination written in one county and have the manuscripts forwarded to another county for grading. The county line in Iowa, so far as certificates are concerned, is an absolute barrier.

But our present system not only gives us varying standards and subjects our county superintendents to the persistent importunity of unqualified persons who seek certificates, but it requires that the superintendent devote time to this work that he could more profitably spend out among the schools, inspiring teachers and pupils and creating a healthy school sentiment among the people. I am aware that many people believe the county superintendent has two essential duties: one to examine teachers and the other to draw his salary. But some of the live county superintendents of the state are demonstrating their greater value in awakening teachers and pupils and patrons to their best endeavor for the improvement and strengthening of the schools.

In such counties it is a distinct loss to the school to withdraw the superintendent from this essential work and set him to poring over examination papers. In more than 80 per cent of the counties of Iowa examinations are held every month, as prescribed by law, and sometimes two or more examinations are held in the same month. The week following most of these examinations, is largely devoted by the superintendent to reading manuscripts and in making out and mailing returns. Last winter I asked our county superintendents to state the number of days spent each year in this work, and from the answers received, I find that the average is fully fifty days a year for each county. Indeed, the time spent would be much more were it not for the fact that in more than four-fifths of the counties of Iowa the institute instructors assist in reading and marking manuscripts written at the beginning or close of the summer institute. But this class of help is expensive, costing the counties from five to ten dollars per day for each person so employed. So it comes about that the examination of teachers in this state is attended with very considerable expense.

Now, instead of this county system with its many inherent weaknesses, it is proposed to adopt the state system of qualifying teachers.

The essential differences would be, first, in the number of examinations; second, in the persons who would mark the examination manuscripts; and third, in the value of the certificate issued and its effect on standards and salaries.

Instead of having examinations every month of the year, there would be four examinations. Two of these would be held in the summer—one in June and one in July. A third examination would be held in October for the accommodation of those deprived of attendance upon a summer examination, or who were to teach the winter term only. Then, for emergency cases, a fourth examination would be assigned for February. So, with examinations the last of February, June, July and October, the entire body of teachers in any county could be accommodated quite as well as with twelve examinations, as now provided by law. The examinations would be conducted in the several counties under the direct supervision of the county superintendent as at present. At the conclusion of the examination the county superintendent would forward all the manuscripts, with possibly one exception, to the office of the state superintendent, and the scholarship of each applicant as shown by the examination manuscripts would then be determined by readers appointed by the state board of educational examiners. The certificate issued would be effective in any county of the state, when registered with the county superintendent and receiving his official signature. Under this system a standard uniform for this state would be secured; county lines, so far as certificates are concerned, would disappear, and the value of the certificate would be greatly increased in that it would be practically a state certificate. And, further, an incentive would be held out to teachers in that the higher class of certificates would be subject to renewal solely on the condition of continued successful teaching. The effect of such a law would be seen in a raising of the standards and in an increase of the salaries of teachers.

We have heard much of low salaries of teachers in Iowa, and the demand for better salaries has been repeatedly made through the press and from the public platform. Most of our teachers are underpaid. We will all agree to

that proposition; but I say to you that there are teachers who would be overpaid at any salary.

The strong teacher is in a sense in competition with the weak. It is, therefore, to the interest of the good teachers and to the interests of the people and of the people's children that the poor and incompetent teachers be eliminated.

I want to see the time in Iowa, and I hope I may see it very soon, when the strong, successful teacher can demand reasonable wages for her services, and when she can say to the school board: "If you do not wish my services at a fair salary, I will teach somewhere else." She can do this when her certificate is good in any county and when there are more schools hunting teachers than teachers hunting schools.

Fortunately we are not left in doubt as to the practical workings of a system such as I have suggested. For ten years New York has had the state system of licensing teachers. Minnesota has had such a system five years, and South Dakota two years. The reports I have received from each of these states commend the system as satisfactory and as a great improvement over the old method of county certification.

Since the conditions prevailing in Minnesota and Iowa are not greatly different, a law that works well there ought, if adopted, to work well here. I want, therefore, to read to you the testimony I have received from a few of the leading county superintendents of Minnesota. I will read brief extracts only to show the general trend of the answers received to my questions as to whether the law was satisfactory and whether it had tended to raise the standard of teaching. Every superintendent to whom I wrote made reply, and 95 per cent of them commend the law as just and eminently satisfactory.

Supt. Geo. F. Howard, of Rochester, says:

It secures uniformity of certificates throughout the state, and teachers are not caused trouble and expense to secure another certificate when they cross county lines to teach as many do. It takes the marking of the papers out of the hands of the county superintendent and relieves him of a large amount of drudgery. It eliminates the matter of favoritism in the granting of certificates, which is one of the greatest evils of the county system of certification. It raises the standard of both teachers and schools and, combined with special aid to rural schools, is doing more to elevate our schools to higher and better things than any other agency that has ever been at work in our state.

Supt. G. E. Parkhill, Fergus Falls, says:

Otter Tail county, the largest in the state in number of school districts, employs about three hundred teachers. Eighteen of this number hold county certificates granted upon private examination. This was made necessary last fall on account of a shortage of teachers. Otherwise every teacher in the county holds a regular state certificate granted by the state superintendent of public instruction. We have always had training schools and still have a six-weeks' summer school and four county teachers' meetings yearly, yet nothing has so effectually raised the standard of our whole teaching force as has our strict observance of the spirit and letter of our present certificate law. The privileges granted under our present law for the issuing of local certificates should be trimmed again. We are now ready for more rigid uniformity and equality in the licensing of teachers.

You will see by the above paragraph that we are willing to go on record for a still higher standard of qualifications and that this standard can be best obtained by a more rigid law for the examining and licensing of teachers.

Supt. Martin L. Pratt, of Granite Falls, says:

The strongest point in favor of the law is that the teacher must depend upon his own exertions, and not on his political influence, in order to get a certificate. There can be no valid objection to the law. It is fair and impartial.

Supt. Fanny G. Gies, of Austin, says:

I believe the work of the rural schools in any state would be improved by the state licensing of teachers. There will be opposition at first from some of the best county superintendents who had high standards and ideals and felt that their authority may be curtailed, and of course opposition from that class of superintendents who occasionally use the granting of certificates for political purposes. But this opposition will soon die out, as it has here, when the majority realize that the standard for teachers of the state as a whole is gradually being raised through this system.

Supt. F. L. Williams of Watertown says:

I am well pleased with it. It has now been in force for more than four years and in that time it has accomplished much good.

First, it has practically done away with political grafting.

Second, it has increased the standard of education among our teachers, permitting them to prepare on a special line of work instead of a constant repetition of all the common branches.

Third, it has had a tendency to raise the wages of the teacher. I believe the wages in my county have increased from 12 to 15 per cent since its passage. I see no serious drawbacks to the law at present.

Supt. Geo. D. Goodrich, of Anoka, says:

The advantages of the Minnesota law may be summarized under five heads:

First—Absolutely impartial, or as nearly so as human arrangement can be.

Second—Uniformity throughout the state.

Third—Certificates are good anywhere, and teachers can take the examination wherever it is convenient.

Fourth—The county superintendent is relieved from the criticism or enmity of those who fail; also from the work of looking over the papers, and has more time for other important school matters.

Fifth—The work of examination is put largely in the hands of experts who have usually been broad minded people of sense and judgment, as well as culture.

Supt. S. J. Race, of Redwood Falls, says:

We have never had such excellence, such fairness, such uniformity and such completeness, as now exhibited in the Minnesota state certificate law. The law, while only in operation six years, has raised the standard of teaching and teachers' scholarship fifty per cent. There can now be no partiality, nor political unfairness in teachers' certificates.

Supt. Julius Boraas, of Red Wing, says:

The system of state examinations for teachers has established uniformity throughout the state, done away with 'pull' and local influence in securing certificates, and elevated the standard of teaching as a whole. It provides for a reasonable system of renewals placing teachers on a more permanent basis than before. Though there are defects in the system they are far less numerous than those of the old county system.

Supt. Mary A. Hanson, of Detroit, says:

After four years of state examination and licensing of teachers, the result manifest in our county is a constantly rising standard of scholarship in the teaching force, and a larger percentage of our teachers attending normal and other higher institutions of learning, in order to meet the requirements.

Supt. G. M. Cesander, of Winthrop, says:

The Minnesota law relative to the examining and licensing of teachers has given a universal satisfaction throughout the entire state.

It has established under the careful supervision of the department of public instruction a uniformity of grading and marking examination papers. I know of no other plan which would be more complete and more accurate as an impartial test of the applicant's scholastic qualification.

Supt. G. C. Borchardt, of Madison, says:

It has in this county raised the standing of the teachers over 83 per cent, I am sure. We have better and stronger teachers as a result of the law. The average salary of teachers in this county for this year will be \$44 per month. I can truthfully say that it is my experience that a teacher who can not pass our examination is not prepared to teach in the schools of the state, or any other state, for that matter.

Supt. W. E. Freeman, of Mankato, says:

It has been my observation that the state system of marking teachers' examination papers has raised the educational standard of the teaching force of the state and has dignified the calling. Some tax-payers object to the state system because teachers are demanding and receiving higher salaries. Such objections are not founded on good grounds for the superior scholarship and better work of the present teaching force of this state demand a higher salary than was paid five years ago.

Such is the testimony of men, many of whom have had experience as officers under both systems and all of whom, because of their official positions, and their professional standing, are well qualified to speak with authority on this subject.

The teacher who is prepared for her work should welcome the change proposed. The examination questions would be no more difficult than those that have been furnished by the state department of education for the past twenty years. The only difference would be a more critical reading of the answer papers, and a possibly closer marking. I am perfectly well aware that a great wail would go out from those unable to pass the state examination; but for such there would be one remedy only, and that, to become proficient in the branches of study covered by the examination. To those sufficiently well informed in a subject to teach it successfully, an examination would have no terrors.

Should the marking of examination manuscripts come under state authority, the greatest care would be exercised to secure a perfectly fair return for each applicant. Aside from the readers, who would be carefully selected, a review board would be retained to re-read the papers of those candidates who fail by a small margin or who fail in one or two subjects. Teachers would also be given the privilege of combining the results of two consecutive state examinations. That is to say, if one examination were successful in a part of the subjects, it would not be required of the candidate to write on the same subjects at the next succeeding examination. This is the method followed both in New York and Minnesota. It would seem that with this assurance any qualified teacher would feel safe under the state system, and since it opens the way to professional recognition in a manner not possible with our present county system of certificating teachers, our best teachers should, in my judgment, welcome this change, and should use their influence to bring it about.

The legislation I have outlined in this address will, I believe, commend itself to the good judgment of the men who will constitute the membership of the Thirty-first General Assembly to meet early in 1906. But no important school legislation can be expected except as the strong teachers and superintendents of the state stand united in its earnest advocacy.

I have, therefore, presented to you, at this early date, proposed changes in our laws governing examinations in the hope that a candid consideration of the same may enlist your hearty support.

## FREQUENT EXAMINATIONS NOT NECESSARY.

The Iowa law requires that the county superintendent devote the last Saturday of each month and the Friday preceding to the examination of teachers.

Taking the average for the state the examinations held in the different months are attended as follows:

January.....	8+	per cent of all the applicants for the year.
February.....	5+	" " " " " "
March.....	10-	" " " " " "
April.....	4+	" " " " " "
May.....	1+	" " " " " "
June.....	7-	" " " " " "
July.....	18-	" " " " " "
August.....	89-	" " " " " "
September.....	9-	" " " " " "
October.....	5-	" " " " " "
November.....	5-	" " " " " "
December.....	5+	" " " " " "

Four examinations would serve all interests quite as well. If the teachers of the state were made to know that the examination could be taken *only* the last of February, June, July or October, they could attend *one* of these examinations. Minnesota and South Dakota get along very well with two examinations for the year, while the great state of New York has but four examinations.

#### A CHANGE NEEDED IN OUR LAWS GOVERNING THE EXAMINATION AND CERTIFICATION OF TEACHERS.

1. The number of examinations should not exceed four in any one year.
2. The county superintendent should be required to conduct examinations under rules prescribed by the superintendent of public instruction, using state lists only.
3. The county superintendent should not be permitted to admit to the examination any person morally or physically unfit to have charge of children and youth.
4. The county superintendent should be required by law to forward all answer papers, except the papers in theory and practice of teaching, to the superintendent of public instruction immediately upon the completion of the examination, said papers to be read and graded by readers appointed by the superintendent of public instruction or by the state board of educational examiners.
5. The county superintendent should be required to grade all papers in theory and practice of teaching, taking into consideration the knowledge he may have of each applicant's success as a teacher or fitness for teaching other than scholarship. He should also examine each applicant in oral reading, his markings in theory and practice of teaching; and in oral reading to be forwarded to the superintendent of public instruction not later than one week after the close of the examination.

6. An applicant passing a successful examination should receive a certificate signed by the superintendent of public instruction, the same to be valid in any county in Iowa when countersigned by the county superintendent of that county.

7. The life of a certificate should be longer than now permitted by law, and reasonable provision should be made for the renewal of first-class certificates.

8. In any change made in the method of examining and certifying teachers, adequate support of the county institute fund should be maintained.

"The uniform certification law has exceeded the most sanguine expectations of this department in its effects upon the standard of the teaching force of the state. In fact it has produced a veritable revolution in its brief history. \* \* \*

The new law dignifies the profession of teaching, places every candidate entirely upon his merits, destroys all possibility of favoritism and gives to the worthy teacher a credential in which he may take pride, and which is good, or may be made good, in any county of the state."

HON. G. W. NASH,

State Superintendent of South Dakota.

"It is everywhere conceded that the present plan has decided advantages over the old one, where every county superintendent had a standard of his own, or no standard."

HON. J. W. OLSEN

State Superintendent of Minnesota.

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# SCHOOL BUILDINGS AND GROUNDS.

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## SCHOOL BUILDINGS AND GROUNDS.

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"Children as well as older people are affected by their environments, and nowhere is this more clearly shown than in the schoolroom. The silent beauty radiating from the harmoniously tinted walls and ceilings; from beautiful decorations consisting of pictures, casts and plants, quickens and purifies the taste. Such beauty of surroundings has a subtle, silent, ethical influence which is not so much seen as felt."

### INTRODUCTION.

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The past twenty years has witnessed a marked advance in school architecture in our larger towns and cities. In many country districts, as well, great care is taken in the construction, ventilation and lighting of the schoolhouse; but in more cases where the smaller schoolhouse is to be erected, little effort is made to secure architectural beauty or improved methods of construction. Many country school boards do not secure plans and specifications from an architect because of the expense involved. As a result, the new schoolhouse is likely to be built on the general pattern of the old one it displaces.

The following pages have been prepared to assist country school boards in the important work of schoolhouse construction. A number of cuts are shown. A low price for complete plans and specifications of each, including the blue prints, can be secured from the architects. For information, the county superintendent should be consulted.

I can not urge too strongly the need of an enlightened and liberal policy in schoolhouse construction to the end that the schoolhouse be attractive in appearance and scientifically constructed. It may require a few dollars more to secure such a schoolhouse, but it should be remembered that the district is building for half a century at least, and only the best should be considered. The schoolhouse with its surroundings should be the most attractive place in the district, in which every child and every patron will take pride. And the schoolroom should not only be inviting, but it should be so ventilated, lighted and heated that the physical health and mental energy of the children shall not be impaired.

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## RURAL SCHOOL ARCHITECTURE.

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(The articles on "School Site," "School Building" and "Ventilation" were prepared by Mr. W. H. Gemmill, Superintendent of Dallas Center Schools.)

### THE SCHOOL SITE.

In selecting a site, the area of the lot, the elevation, the character of the soil, the drainage, the direction of the slope, and the central location, should be considered. No school ground should ever contain less than one acre, with a frontage of 180 feet and a depth of 240 feet. In the larger con-

solidated district it should contain not less than two, and may very properly contain three acres. If possible it should be an elevated piece of ground, a small knoll, or a gentle slope, and the drainage should be away from the yard and house. The soil should be light, dry and porous. A sandy or gravelly subsoil affords the best drainage, while an eastern or a southern slope secures rapid evaporation. Under no circumstances should the stratum be clay impermeable to ground water. It is desirable that the schoolhouse should be located near the geographical center of the district, and the board should select the site with this in mind; but the site should be high and dry and the brightest and most beautiful spot near the center. Under no conditions should pleasant and wholesome surroundings be sacrificed if a better and more suitable site can be secured some little distance away. The additional distance in traveling will be labor well spent, if thereby, the pupils are placed in more beautiful and inspiring scenes.

The house should be placed in front of the center with the play ground in the rear. Where the house is heated by a furnace, the fuel supply should be stored in the basement. If there is no basement, a small building for fuel should be erected at the rear of the schoolhouse.

#### SCHOOL BUILDING.

The foundation walls of the schoolhouse should be brick or stone, and extend a little below "frost line." The walls should be at least one foot in thickness, and extend about three feet above the surface. It is usually well to have a vertical air chamber; and if there is no basement suitable ventilators should be provided on each of the four sides so as to permit of thorough ventilation of the space between the surface and the floor during the summer months. Good shutters should be provided for these openings in order that the winter's cold may not affect the air within the room near to the floor.

It would also be a step in the right direction if there were a basement under the entire building, partitioned into a furnace-room, a work shop, and a kitchen. Adequate, but inexpensive tools for manual training can be bought for twenty-five (\$25) dollars. Here the boys would learn to construct simple things in a scientific manner, and even supply the apparatus necessary for the school. A good stove and some kitchen utensils would be sufficient for the teaching of the simple principles of domestic economy. These are practical things, and by their introduction we are but meeting the crying demands of the hour.

The basement should be about 8 feet high, and should be well supplied with cupboards, shelves, tables, &c.

"The house should be simple in construction, yet dignified in its adornment, and devoid of all attempts to be elaborate in appearance," writes an architect.

As a traveler passes through Iowa, he soon learns that white is the dominating color of our schoolhouses. Why this simple color is used so generally, we do not know; but we are confident that a more attractive building may be secured at no increase in the cost if other colors were used. The following has been suggested:

"Colonial style of light yellow with white trimmings makes an excellent combination at once pleasing to the eye. Also gray tints and darker trimmings, or light yellow with

dark green trimmings are both beautiful and reasonable in price. Plain walls and green blinds make a picture both attractive and pleasing."

#### VENTILATION.

"The simplest and most efficient form of ventilation for rural schoolhouses is a cold air box from an opening in the foundation wall, under the floor to a point immediately beneath the stove. It should be as short and direct as possible. The fresh air conduit should be covered at both ends with coarse wire, and in the shaft screens placed so as to exclude the flies. The opening beneath the stove should be provided with a slide which may be completely closed when the room is swept."

"The stove should be surrounded by a Russia iron jacket, fastened to the floor and extended 8 inches above the stove. By this means, fresh air is admitted into the room in any required volume, and passed near the stove in such a way as to be warmed before passing throughout the room."

The register opening into the ventilating flue, or chimney, should be about two feet square, and about two inches from the floor.

Any schoolhouse provided with this simple appliance, will be reasonably well ventilated at all times when the stove is used for heating purposes. During the remainder of the year ventilation can be secured by opening the doors and windows.

The chimney and ventilating flue should be built together.

Many rural schoolhouses are now heated by furnaces, and when properly equipped the subject of ventilation ceases to be a complex problem.

#### OUTHOUSES.

For rural schools the outbuildings should be located in the rear of the lot and as widely separated as possible. They should be screened from observation. A row of White Spruce or Red Cedar properly placed will make an effective screen in a few years and will add to the beauty of the place. In eastern Iowa, Arbor Vitæ may also be used. The closets and urinals should be so constructed as to provide for the separation of pupils using them, and they should be provided with vent flues so arranged that all foul odors and air will be carried out below the breathing line.

Inside walls and ceilings should be covered with matched boards and both the inside and outside should be thoroughly sand painted to prevent markings. In each of the buildings one seat should be provided so low that young children may occupy it and still rest the feet on the floor. These buildings should be well built. They should be raised at least one foot above the ground and placed on substantial foundations. The vault should be of cement or brick and made water tight. It should extend one foot beyond and in the rear of the building. The vault floor should slope toward the rear to facilitate cleaning, and the projection of the vault at the rear should be closed by a tightly fitting door secured by a lock. The contents of the vault should be frequently covered with dry earth, dry ashes or chloride of lime, and the vault should be cleaned at least once a year and thoroughly disinfected.

#### WATER SUPPLY.

Every school building should be supplied with pure water.

The well should be sunk on high ground and every possible precaution used to prevent contaminating matter of any kind reaching the water sup-

ply. If the well is of the ordinary type, the upper three feet should be built of hard brick laid in cement; and the top be securely covered. The water that has stood in the well through the long summer vacation should be pumped out a day or two before the school opens in the fall.

#### LIGHTING.

The schoolroom should be lighted by windows placed in the rear and side walls. Such windows should contain glass surface of not less than one-fifth of the floor space of the room and all desks and seats should be so arranged that the windows will be on the left and in the rear of the pupils. The room should be of sufficient size to allow not less than fifteen feet of floor space and not less than 180 feet of air space for each pupil.

#### SEATING.

In schools where two or more sizes of school desks are required, each separate row should contain desks of a uniform size. The prevalent custom in country schools of having four or five sizes of desks in each row—the small ones in front and gradually increasing in size to the rear—can not be too strongly condemned. Under such an arrangement either the desk or the seat will be too high. If one fits the pupil the other will not. The physical welfare of the child requires an arrangement of desks in ungraded schools as indicated below.

Single desks should be used and in the one room country school five sizes are usually required as follows:

Single Desks.					
Size.	Height of Seat.	Width of Top.	Length.	Floor Space.	Are Accommodated.
B	15 inches	15 inches	24 inches	81 inches	17 to 26
C	14 inches	14 inches	21 inches	27 inches	13 to 17
D	13 inches	13 inches	21 inches	27 inches	10 to 13
E	12 inches	12 inches	18 inches	26 inches	7 to 10
F	11 inches	12 inches	18 inches	26 inches	5 to 7

In placing the desks the following rule should be strictly followed:

For first primary pupils (size F desk) place the edge of the desk next to and in front of the child 9 inches from the back of the seat in which he is seated. For size E desks this distance should be 10 inches; for size D, 11 inches; size C, 12 inches, and size B, 13 inches.

#### BLACKBOARD.

The blackboard should be three feet six inches wide. Slate is recommended. It will cost more at the outset, but since no repairs will ever be required it is the cheapest in the long run. In ungraded schools the bottom of the blackboard should be two feet six inches from the floor. If the room is to be used exclusively for primary pupils, the bottom of the blackboard should be two feet from the floor, and if exclusively for advanced grades it should be three feet from the floor. The blackboard should extend entirely around the room, except in the spaces occupied by the doors and windows.

# HIGH SCHOOLS.

LIST OF SCHOOLS FULLY ACCREDITED TO THE STATE UNIVERSITY AND OTHER STANDARD COLLEGES OF IOWA.

## PUBLIC SCHOOLS.

Ackley.	Des Moines, North.	Lake Mills.	Rockwell City.
Adel.	Des Moines, West.	Lamoni.	Rock Rapids.
Albia.	Dubuque.	Le Mars.	Rulife.
Algona.	Dexter.	Lenox.	Sac City.
Alta.	Dows.	Leon.	Samborn.
Ames.	Dunlap.	Lisbon.	Sheldon.
Anamosa.	Eagle Grove.	Lyons.	Shell Rock.
Atlantic.	Eldon.	Malvern.	Sherandoah.
Audubon.	Eldora.	Manchester.	Sibley.
Avoca.	Elkader.	Manning.	Sidney.
Bedford.	Emmetsburg.	Maquoketa.	Sigourney.
Belmond.	Escherville.	Marango.	Sioux City.
Boone.	Fairfield.	Marion.	Sloan.
Britt.	Forest City.	Marshalltown.	Spencer.
Brooklyn.	Fort Dodge.	Mason City.	Spirit Lake.
Burlington.	Fort Madison.	McGregor.	Storm Lake.
Capital Park, Des Moines.	Garden Grove.	Missouri Valley.	Stuart.
Carroll.	Garner.	Montezuma.	Tama City.
Cedar Falls.	Glenwood.	Monticello.	Tipton.
Cedar Rapids.	Glidden.	Mount Ayr.	Toledo.
Centerville.	Greene.	Mount Pleasant.	Traer.
Chariton.	Greenfield.	Muscatine.	Valley Junction.
Charles City.	Grinnell.	Nashua.	Villisca.
Cherokee.	Grundy Center.	Nevada.	Vinton.
Clarinda.	Guthrie Center.	New Hampton.	Walnut.
Clearfield.	Guthrie Co., Panora.	Newton.	Wapello.
Clarion.	Hamburg.	Oak Park, Des Moines.	Washington.
Clear Lake.	Hampton.	Odebolt.	Waterloo, East.
Clinton.	Harlan.	Oelwein.	Waterloo, West.
Colfax.	Hartley.	Onawa.	Waukon.
Columbus Junction.	Hawarden.	Orange City.	Waverly.
Corning.	Holstein.	Osage.	Webster City.
Corydon.	Humboldt.	Oscarola.	West Liberty.
Council Bluffs.	Ida Grove.	Oskaloosa.	West Union.
Cresco.	Independence.	Ottumwa.	Wilton.
Creston.	Indianola.	Parkersburg.	Williamsburg.
Dallas Center.	Iowa City.	Pella.	Winterset.
Davenport.	Iowa Falls.	Perry.	
Decorah.	Jefferson.	Postville.	
Demison.	Keokuk.	Red Oak.	
Des Moines, East.	Knoxville.	Reinbeck.	
	Lake City.	Rockford.	

## PRIVATE SCHOOLS.

Cathedral School (Sioux City).	Mount St. Joseph Academy (Dubuque).	St. Mary's High School (Iowa City).
Cedar Valley Sem. (Osage.)	Nora Springs Seminary.	Washington Academy.
Charles City Col. Academy.	Northwestern Class'l Acad. (Orange City).	Wilton German-English Col.
Decorah Institute.	Sac City Institute.	Whistler College (Salem).
Denison Normal School.	St. Agatha's Sem. (Ia. City).	Woodbine Normal School.
Epworth Seminary.	St. Frances Academy (Council Bluffs).	St. Katherine's (Davenport).
Howe's Acad. (Mt. Pleasant).		
Iowa City Academy.		
Jewell Lutheran College.		

## PARTIALLY ACCREDITED PUBLIC SCHOOLS.

Adair.	Eldon.	Aspleton.	St. Ansgar Seminary.
Allerton.	Elkader.	Mechanicsville.	Shelby.
Alton.	Farmington.	Milton.	Sioux Rapids.
Anita.	Fayette.	Morning Sun.	Springdale.
Bloomfield.	Fonda.	Moulton.	Springville.
Brighton.	Fontanel's.	Neale.	State Center.
Charter Oak.	Grand Junction.	New Sharon.	Tabor.
Coon Rapids.	Hubbard.	North English.	Winfield.
Correctionville.	Keosauqua.	Northwood.	
De Witt.	Kingsley.	Riceville.	
Dysart.	Lime Springs.	Richland.	

## HIGH SCHOOL FACULTIES.

College Preparation, Experience, Number Employed,  
Recitation, Periods, Degrees.

Institutions Attended One or More Years.	Attendance, number-years-number teachers-experience, years, periods.							
	Four-year.		Three-year.		Two-year.		All Classes.	
	Number.	Average.	Number.	Average.	Number.	Average.	Number.	Average.
State University of Iowa .....	191	2.6	20	2.5	1	1.	218	2.7
Other Iowa Colleges .....	450	3.4	78	3.	20	2.4	534	3.2
Colleges and Universities of Other States .....	419	3.7	39	2.6	5	2.2	458	3.1
Iowa State Normal, .....	291	2.5	81	2.5	8	2.2	40	2.4
Other State Normals, .....	77	2	14	2	7	2	96	2.
Other Institutions Above High School Grade.....	76	2.3	2	2.1	12	2.6	115	2.3
*Total by Institutions .....	1,515	3.	251	2.5	75	2.3	1,842	2.9
Teachers-experience-recitations.								
Number of different teachers included in above report.....	1,206	3.7	214	3.	66	2.6	1,480	3.6
Number having experience .....	1,067	3.4	200	4.3	71	4.	1,331	3.1
Number reporting no experience, .....	503	.....	60	.....	22	.....	385	.....
Total number of teachers employed .....	1,870	.....	260	.....	96	.....	1,724	.....
Average number of recitations per teacher .....	5.6	.....	11	.....	12	.....	6.3	.....
Number of schools reporting .....	301	.....	170	.....	89	.....	550	.....
Degrees Held.								
Number holding Ph. D. degree .....	8	.....	1	.....	.....	.....	9	.....
Number holding A. M. degree .....	54	.....	7	.....	1	.....	61	.....
Number holding A. B. degree .....	254	.....	20	.....	2	.....	281	.....
Number holding M. S. degree .....	18	.....	8	.....	.....	.....	18	.....
Number holding Ph. B. degree .....	237	.....	8	.....	.....	.....	238	.....
Number holding B. S. degree .....	127	.....	18	.....	3	.....	148	.....
Number holding M. M. degree .....	63	.....	32	.....	4	.....	94	.....
Number holding B. D. degree .....	124	.....	40	.....	16	.....	180	.....
Number holding L. L. D. degree .....	.....	.....	1	.....	.....	.....	1	.....
Number holding D. D. degree .....	.....	.....	1	.....	.....	.....	1	.....
Number holding B. L. degree .....	23	.....	1	.....	.....	.....	24	.....
Number holding E. M. E. degree .....	1	.....	.....	.....	.....	.....	1	.....
Number holding M. D. degree .....	2	.....	.....	.....	.....	.....	2	.....
Number holding M. L. degree .....	2	.....	.....	.....	.....	.....	2	.....
Total number of degrees held .....	908	.....	5	.....	29	.....	1,057	.....

## THE HIGH SCHOOL COURSE OF STUDY.

High schools are organized in this state under section 2776 of the Code which states that the board of directors of any school corporation "shall have power to maintain in each district one or more schools of a higher order, for the better instruction of all in the district prepared to pursue such a course of study, and it may establish graded or union schools and determine what branches shall be taught therein, but the course of study shall be subject to the approval of the superintendent of public instruction."

It was doubtless the intent of the legislature that there should be something of uniformity in high school courses, hence the requirement that such courses be approved by the superintendent of public instruction. But after courses are once adopted whether with or without official approval, modifications are frequently made solely upon the motion of city superintendent, high school principal or school board. Something of the confusion that has resulted is shown in the detailed report on high school courses of study set out in the pages that follow.

The high school manual issued five years ago by the Iowa State Teachers' Association presented a four year latin course that is now followed more or less closely in a large number of our four year high schools. But aside from this there is little semblance of uniformity in the high school courses offered.

With the hope to formulate courses of study suitable for the various classes of high schools, a number of Iowa school people representing every phase of educational work above grammar grades, were recently asked as to what should be included in a two year, three year and four year course of study. The replies made show the widest divergence of opinion. Hence only a few general directions, on which there is substantial agreement, will be given.

Educators are fairly well in accord on the following points:

1. High school teachers should have training representing at least four years of college or normal school work above high school grade.

2. A four year course above grammar grade should not be attempted in districts where the assessed valuation is much or any below \$200,000, or where fewer than three thoroughly prepared teachers, devoting full time, can be employed.

3. A three year course will require the services of two teachers on full time. In both the four year and three year high schools additional teachers will usually be required if two or more courses are offered.

4. In all high schools the recitation periods should never be less than thirty-five minutes each and they should, if possible, be forty or forty-five minutes each. No subject should be pursued for less than eighteen consecutive weeks, and very few subjects should be pursued for less than a full school year of thirty-six weeks.

5. Every two year high school course should contain eight year units of work, every three year course twelve year units of work, and every four year course sixteen year units of work,—a unit of work being understood as one year's work of one period a day, or 180 or more recitations.

6. (a) In every high school offering a two year course of study the following should be required:

Algebra, one unit.

English, two units.

History, one unit.

Science, one unit.

Civics, one-half unit.

(b) In every course offered in a three year high school there should be required in addition to "a"—one year of plane geometry, and an additional year of English.

ce every course offered in a four year high school there should be required in addition to "a"—one year of plane geometry, an additional year of English, and an additional half-year of history.

7. The additional work needed for any course may be selected from the following options:

Algebra, one-half unit.

Algebra review, last half of senior year, one-half unit.

History, one unit.

Economics, one-half unit.

Physiology, one-half unit.

Science, one unit.

English, one unit.

Solid Geometry, one-half unit.

Bookkeeping, one-half unit.

German, two to four units.

Latin, two to four units.

Review of common branches in senior year, one unit.

Manual Training, one unit.

The following courses are suggested for guidance only. Educators are not fully agreed on any one of the courses in its entirety:

### A TWO-YEAR COURSE OF STUDY.

FIRST SEMESTER.	NINTH GRADE.	SECOND SEMESTER.
English, Algebra, Civics, Physiology,	English. Algebra. U. S. History. Botany or Zoology.	
	TENTH GRADE.	
English, Algebra or Physics, Economics, General History.	English, Physical Geography or Physics, Arithmetic Review, General History.	

*Note 1.* The work in English for the first year may include Grammar, Composition and Literary Readings; and for the second year, Composition and Rhetoric, and English Classics.

*Note 2.* If Physics is given a place in the course, it should be for the entire school year.

### A THREE-YEAR COURSE OF STUDY.

(From Bulletin of the State University.)

#### COURSE OF STUDY.

FIRST SEMESTER.	SECOND SEMESTER.
ENGLISH. { LATIN OF { GERMAN. ALGEBRA. { Physiology or { Zoology.	ENGLISH. { LATIN OF { GERMAN. ALGEBRA. { Botany or { Physical Geography.
TENTH YEAR.	
ENGLISH. { LATIN OF { GERMAN. ALGEBRA  { GENERAL HISTORY { or GREEK HISTORY.	ENGLISH { LATIN OF { GERMAN. { Book-keeping or { Science. { GENERAL HISTORY. { or ROMAN HISTORY.
ELEVENTH YEAR.	
ENGLISH. PLANE GEOMETRY. { CIVICS or { U. S. HISTORY. { LATIN OF GERMAN or { PHYSICS.	ENGLISH. PLANE GEOMETRY. { Higher Arithmetic and { Algebra Reviewed. { Latin or German or { PHYSICS.

**A FOUR-YEAR LATIN COURSE.**  
(From] Bulletin of the State University.)

NINTH YEAR.	
<b>FIRST SEMESTER</b>	<b>SECOND SEMESTER.</b>
ENGLISH.	ENGLISH.
LATIN.	LATIN.
ALGEBRA.	ALGEBRA.
{ Physiology or	{ Botany or
{ Zoology.	{ Physical Geography.
TENTH YEAR.	
ENGLISH.	ENGLISH.
LATIN (Caesar.)	LATIN.
ALGEBRA.	{ Science or
	{ Bookkeeping.
{ General History or	{ General History or
{ Greek History.	{ Roman History.
ELEVENTH YEAR.	
English.	English.
LATIN (Cicero.)	LATIN.
PLANE GEOMETRY.	PLANE GEOMETRY.
	{ History or
(U. S.) History.	{ Civics.
TWELFTH YEAR.	
ENGLISH.	ENGLISH.
LATIN (VIRGIL.)	LATIN.
	{ Higher Arithmetic and
Solid Geometry.	{ Algebra Reviewed.
PHYSICS.	Physics.

**HIGH SCHOOL COURSE OF STUDY.**

Adopted by the Iowa State Teachers' Association,  
December 29, 1899.

**FIRST YEAR.**

Latin, Recitations per week, 5  
Algebra, Recitations per week,  
English, Recitations per week, 4  
History, (Ancient history preferred) 5

**SECOND YEAR.**

Latin, Recitations per week, 5  
Algebra for first half of year, recitations per week, 4  
Concrete Geometry, (Option B), half-year, recitations per week, 4  
English, Recitations per week, 3  
History, (Modern or adv. U. S.), recitations per week, 3  
Science (from group A), recitations per week, 4

**THIRD YEAR.**

Latin, Recitations per week, 5  
Plane Geometry, Recitations per week, 5  
English, Recitations per week, 3  
French, German or Greek (Option A), 5

## FOURTH YEAR.

Latin, Recitations per week, 4

English, Recitations per week, 3

Physics, Recitations per week, 4

Political economy, one-half year, recitations per week 3

Civics, one-half year, recitations per week, 3

French, German or Greek (Option B) recitations per week, 5

## Options.

## Group A—SCIENCE.

**SECOND YEAR OF COURSE.**—Botany throughout the year preferred; Zoology throughout the year, second choice. A half year of either of these subjects with second half of the year given to Physiography or Physiology or Geology or Astronomy will be accepted, but the one continuous study is decidedly preferred.

**THIRD YEAR OF COURSE.**—Instead of French, German or Greek, one full year of Botany, Zoology or Chemistry; provided it has not been selected in second year.

## Group B—MATHEMATICS.

**SECOND YEAR OF COURSE.**—Instead of Concrete Geometry, Advanced Arithmetic or Book-keeping may be taken.

**FOURTH YEAR OF COURSE.**—Instead of French, German or Greek, one-half year of solid Geometry and one-half year of Trigonometry may be taken.

The course contemplates nineteen recitations per week. Music, Free-Hand Drawing or Manual Training may be pursued in addition to these if desired; otherwise there should not be more than twenty recitations of thirty to thirty-five minutes each per week.

## A NOTABLE EXPERIMENT.

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The following report made by President Seerley, upon request, is commended to the thoughtful consideration of all persons interested in the high school problem.

### THE REVISION OF THE PUBLIC SCHOOL CURRICULUM.

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A Report Concerning Certain Tests That Have Been Made Regarding the Program of Studies of the Public Schools by the Advanced Training Department of the Iowa State Normal School,  
—Wilbur H. Bender, Supervisor.

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By Homer H. Seerley, President.

*The Character of the Investigation.*—For a period of more than six consecutive school years certain revisions of the public school standard curriculum have been in progress, careful tests of the suitability of all new work to the age and the development of the pupils have been made while the the effect of all such changes has been observed and noted under the supervision of the Advanced Training School department of the Iowa State Normal School. These investigations have been conducted by Mr. Wilbur H. Bender, the supervisor of that department, having in view the abridgement of the curriculum wherever that is desirable or possible and also the enrichment of the course of instruction of the grammar grades wherever necessary. At the same time, a rearrangement of the branches of study assigned to the high school has been undertaken in order to secure such sequence as adapts all the varieties of the work accepted to the development and the capability of the pupils, endeavoring all the time to save in years of labor to be given and in needless effort to be required without any loss of educational results in either totality of scholarship or of mental development.

*The Tests as Applied.*—These tests have been given sufficient attention on the part of the training school faculty and have reached over sufficient time to enable such a report to be made as will give assurance that the conclusions announced are safe, reliable and scientific. In all these investigations Supervisor Bender has been materially assisted by expert critic teachers who are capable in qualifications and in experience and are in harmony with him in spirit and in purpose in faithfully carrying out the endeavors so as to reach successfully reasonable and fair conclusions. At the same time the pupils who have pursued this revised curriculum have been regularly admitted to the classes of the Normal School on the same plan as high school graduates and have been required to pursue the same studies in the same classes for a period of more than four years, their power as students and their capability as workers being compared through the reports filed by their instructors during this period. Such students are found to be in all respects equivalent and in some respects superior to those who have graduated from the standard curriculum although their length of time in preparation has been much shorter than that generally assigned to graduates from a high school. These tests have been made by the Normal School in order to determine the kind, quality and sequences of the work that should be adopted for the instruction of pupils in the public schools and a complete outline of what has been accomplished will soon be published for general distribution.

*The Theses that are Established.*—The following brief statements are made concerning the results that are established by these investigations, it being believed that they are worthy of announcement and that the results obtained are deserving the consideration of all persons who are interested in the improvement of the work of the public schools. They are announced in the form of theses to insure brevity and to make them more easily comprehended by those interested.

1. *Reduction of Time.*—It is definitely established by the tests that it is possible to easily reduce the necessary time of attendance upon the public schools at least a full school year and at the same time prepare the pupils for college studies better than can be accomplished as the present-day standard curriculum is arranged and managed in the best schools.

2. *Reorganizing Grade Work*—This result of saving the time of the pupils by at least one school year has been

accomplished by suspending the subject matter of the studies commonly allotted to seventh and eighth grades until a more convenient season, and by substituting therefor such secondary school studies as are known to be adaptable to the age and the capability of such pupils. Whenever any of the work of the standard seventh and eighth grades is taught it is done because there are certain phases that are regarded as suitable and desirable, all such cases the selections are carefully made and the plans of instruction are especially prepared to suit the new curriculum.

3. *Teach Grammar Grade Subjects.*—The standard courses of study, now by custom taught in the public schools to pupils of the seventh and eighth grades, are given sufficient space later in the curriculum of the secondary school at a time when the pupils have reached a mental development and have acquired such capability of initiative and application that the entire subject matter of these studies can be accomplished in much briefer time and with much more satisfactory comprehension of their practicability than is at all possible at the time of life and with the mental immaturity existing at the present with such pupils.

. *German and Latin.*—It is found that language studies, such as are obtainable in German and Latin, when taught in a way conforming to the mental development and to the present knowledge of the pupils, are specially appropriate for the pupils belonging to the seventh and eighth grades. Such work gives the pupils training in the development of vocabulary and in the usages of language so that they are enabled to be more effective in the pursuance of their book studies in the school work that follows. The development of linguistic ability and the acquirement of an extensive vocabulary also gives decided power to scholarship, every one of these students can show.

5. *Suitability of the Languages.*—It is also an established fact that the study of German and Latin is comparatively easier for such pupils than is any of the work now assigned by the standard curriculum to these ages and grades, the cause being that the work as taught is particularly well adapted to their mental development as well as to their personal interest in the success attained.

6. *Benefits to the Discipline.*—It has always been ascertained that such a modification of the work assigned reduces very much the necessity to emphasize and require discipline, as the

pupils so taught are more successful in using their powers and their willing continuance in school at a time when many pupils decline to remain longer under different circumstances shows that they desire to be in school in preference to taking up other work—a very notable result.

7. *The Results Obtained.*—The tests that have been made in these investigations enable the conclusion to be formulated that all the work now assigned to the public school, from the seventh to twelfth grades inclusive, can be readily accomplished in five school years if the curriculum be revised in accordance with these plans and specifications, and that as a result the pupils will be found to be better trained in language, more capable in the pursuance of their studies, more ready in the writing of English and in the preparing of addresses than has been possible in a year longer time using the standard curriculum. This result is due to the adoption of a proper sequence of studies, which conforms to the mental interests and the mental development, enabling the application of the pupils to their school work to be more definite and more effective.

8. *The Supreme Difficulty of the Common Branches.*—Experience has also ascertained that there are no more difficult courses of study in the entire program of studies of the public school than these so-called common branches. These subjects are not only difficult for children as they are also the most decided test for the capability of adults. Advanced arithmetic, technical grammar, including so-called language lessons, the special types of geography commonly selected, the physiology and the United States history usually assumed as appropriate are all of them beyond the capability of children. The examinations that are annually held by the state board of educational examiners also establish the fact that in no line of tests are teachers more incapable of expertness than in the so-called common school studies. This is not due to the fact that they have not given careful attention to them but to the fact that their technicalities are extremely difficult and are not particularly practical or interesting. Since these things are true it is evident that there is no place in the children's school for these difficult lines of study and that it is necessary to postpone them until there is attained the type of judgment, imagination and reasoning that belongs to the adult mind.

9. *Time Required for Common Branches.*—It has also been found possible to get a reasonable knowledge of the common

branches,—arithmetic, English grammar, geography, physiology and United States history in twelve weeks to each subject when the student has reached the right mental development, and that even the acquirements of those limited periods of application are superior to those secured during the entire two years given to the seventh and eight grades.

10. *What Work is Suitable for Seventh and Eighth Grades.*—There is plenty of subject matter in the kind of studies commonly assigned to the secondary school which is found to be particularly suitable to the demands of the mental condition found in the seventh and eighth grades. Hence, there are numerous solutions that can be made—all of which will be found improvements over the customary assignment. The selection of these studies will depend upon the view point of those in authority, as their ideals and preferences will give strength to different solutions. In this investigation tests have been made that approve the following:—(1) Stories of history, omitting in the teaching the systematic arrangement deemed essential by chronology or logic; (2) Selections from American and English literature, making choices from those things that are specially adapted to the pupils taught; (3) the elements of nature study as found in elementary physiography, natural history, experimental physics and other sciences; (4) suitable work in algebra and inventional geometry; (5) German and Latin.

Such a plan well carried out makes progress a reality, teaching a pleasure and the pursuance of such work a blessed opportunity to pupils—a remarkable change from present day experience with the standard curriculum.

11. *Other Valuable Work Possible.*—In addition to the amount of work that is necessary to fully give the common program of studies as demanded in the secondary schools, time is now easily found for vocal and instrumental music, free hand and mechanical drawing, manual training, domestic science, physical training and extensive courses of reading in the best books of literature, and that without detracting in the least from any of the requirements deemed essential for graduation from secondary schools.

12. *The Subjects of Supreme Value.*—The tests that have been made during this investigation have called attention to the fact that there are great differences in the value of studies as regards their aid in after education, and that such questions ought to be given proper consideration. It has also been con-

stantly emphasized that well qualified and well trained teachers are of supreme importance beyond all plans and systems. At the same time the teaching that was done during the progress of this investigation at the Iowa State Normal School has been in the hands of senior students under the direction of critic teachers, no student having any class more than twelve weeks. It is evident that better results are obtainable than have been here secured if the teachers were all skillful and permanent and the new curriculum was given an opportunity under the most favorable circumstances. Reason is given to suggest that the entire public school curriculum could be reduced from twelve to ten years for the average pupil under these bettered conditions. But even if one year of work and time is all that is able to be eliminated by this more rational treatment of the curriculum, it is certainly worth while whether the value of time to the pupil is considered or whether the saving of expense to the taxpayer is heeded. There is much chance for improvement in the curriculum, and to this end energy and wisdom of teachers and people should be directed.

## EXHIBIT OF THE REVISED CURRICULUM.

AS USED AT  
THE STATE NORMAL SCHOOL.

## SEVENTH GRADE.

*Arithmetic*.—This is based upon such simple matters as may naturally come within the experiences of pupils of this age. Attention is given to training in the sensible mastery of essential mechanical processes of the subject, business practices, etc.

*Geography*.—A study of the leading grand divisions in comparison with North America. Graphic illustration in charting conditions and in making conclusions from statements of facts about other countries measured by the knowledge of our own country.

*English*.—Literature and some phases of English grammar.

*History*.—Systematic study of Stories of the Romans and Stories of the English. (These have been preceded in the earlier grades by the Norse Stories, Stories of the Chosen People, and Stories of the Greeks, and a study of the United States through historical stories and biographies of prominent persons.)

*Nature and Environment*.—Climate, plant and animal life, human life in the community. etc.

*German*.—Daily work in reading and discussion of simple German stories. All class-room reading and conversation conducted in German and stories read and understood without translation.

*Drawing* daily, music daily, manual training two periods per week, physical training alternating with other subjects.

## EIGHTH GRADE.

*Mathematics*.—Certain phases of arithmetic continued, simpler parts of algebra as growing out of the arithmetic, one entire term of concrete, inventional or constructive geometry.

*English Literature* in daily short readings.

*History*.—Systematic study of the United States History, first from rapid reading of the stories of the Thirteen Colonies and Stories of the Great Republic and then two terms of careful study of text and references in United States History.

*Science* from environment and a half year on elementary physics.

*German*.—Continuation of the reading of the previous year with systematic work in German grammar and in written composition.

*Latin*.—Begin with simple stories, about two-thirds of the year are spent on first year Latin using ordinary first year text. Drawing same as seventh grades.

#### NINTH GRADE.

*Mathematics*.—Algebra.

*Science*.—Physical geography half the year. Physiology half the year.

*English*—Study of American classics and Shakespeare.

*History*.—Systematic study of English history and half year on U. S. history from the viewpoint of geographical influences.

*German*.—Reading and translation German literature with constant attention to grammar. Classroom conversation in German.

*Latin*.—Finish first year Latin. Read Gate to Caesar and begin Caesar. Manual and physical training and music.

#### THIRD YEAR OR GRADE.

*Mathematics*.—Geometry.

*Science*—Physics.

*English*.—Composition and rhetoric and literature with some attention to historical development.

*History*.—General history.

*Civics and Economics*.—One-half year each.

*German*.—Reading classics and composition. Continuation of conversational German.

*Latin*.—Caesar one half year. Virgil one half year. Music, manual training and physical training.

**NOTE**.—Not all subjects mentioned in these grades appear in all terms. The recitation periods are but thirty minutes, but it seems that thirty minutes with a small class working vigorously are worth more than a longer period with pupils of this age and in larger classes. Some work in the last year is done with no study outside the recitation period by pupils. The study of text and discussion are all given in class periods in subjects selected for such treatment. The most advanced classes when carrying full work put in about three and a half hours per day in recitation. More work is done in the secondary subjects in shorter periods per day because of the better preparation made by the course in the lower grades.

## HIGH SCHOOL STASTICS

High school.	Name of instructors.	Number rec. periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Albia.....	F. E. George .....	2	Upper Iowa U. 5 Howard Univ'ty 1	.....	.....
	Maisy Schreiner .....	6	I. W. U. 4	.....	.....
	Myrta Harlow .....	6	.....	.....	4 summer terms Univ. of Minn.
	Etta J. Rider .....	6	S. U. I. 2	I. S. N. S. 2	.....
	Lettie E. Shepherd .....	6	Hastings College (Nebr.)	.....	.....
Alden.....	Macy Cambell .....	6	.....	I. S. N. S. 4	.....
	Olementine Runnel .....	7	Iowa College 3½	.....	.....
	Mabel Whitney .....	6	.....	I. S. N. S. 2	.....
Algona ..	Ada E. Smith .....	7	U. of Minn. 5	.....	.....
	Hilda G. Lundin .....	7	.....	I. S. N. S. 2½	.....
	Louise McCoy .....	6	U. of Minn. 5	.....	.....
	M. J. Coate .....	6	U. of Mich. 2	.....	.....
Allerton ..	J. F. Holliday .....	8	.....	Mo. State N. 4	Univ. extension work 2 years
	J. B. Jenison .....	8	Tarkio College 5	.....	.....
	Myrtle Duncan .....	7	.....	I. S. N. S. 1 term	.....
Ackley...	Laura M. Graves .....	7	S. U. I. 4	.....	.....
	Bertha M. Denny .....	7	Drake 4	.....	.....
Adair .....	Lulu E. Hohanselt .....	8	Simpson Col. 5	.....	.....
	Winifred E. Duff .....	8	Drake 5	Minn. St. Nor. 1	.....
	Mrs. W. H. Skitt (Music) ..	1	.....	.....	.....
Afton.....	Geo. D. Eaton .....	4	.....	I. S. N. S. 3	.....
	Miss Ethel Rundolph .....	5	U. of Chicago 1	.....	Corning Acad. 2
	Miss Ruby O. Ramedell .....	7	Iowa College 3	.....	Valparaiso 2
	Miss Elsie Welty .....	8	.....	.....	.....
Agency ..	C. F. Goltry .....	.....	Drake 4 S. U. I. 3 mo.	.....	Shen. Nor. Col. 3 mo.
	Olara C. Goltry .....	.....	Drake 1	.....	Chariton Acad. 1
Akron.....	O. J. Smith .....	8	.....	.....	North Western Nor. Letmars 4
	F. S. Schmalle .....	8	.....	.....	North Western Nor. Letmars 2

The figure following the name of the institution indicates years attended.

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yr's experience in H.S.	High School Courses.											
			Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
M. Acc't			Algebra	63	5	35	Botany	18	5	5	Physiology	18	5	35
B. S., M. S., A. B.			Geometry	54	5	35	Eng. History	18	5	35	Eng. Grammar	18	5	35
A. M., Ph. B., Ph. M.			Arithmetic	36	5	35	Bookkeeping	18	5	35	Com. Arith'metic	18	5	35
A. B., A. M.			General Hist.	36	5	35	Latin	144	5	35	Civics U. S.	18	5	35
Ph. B., M. Di.			U. S. History	36	5	35	Zoology	18	5	35	Geology	18	5	35
A. B.			Physical Geog.	36	5	35	Commercial law	18	5	35	Political Econ.	18	5	35
			Physics	36	5	35								
			English	144	5	35								
M. Di.			Algebra	54	5	35	Physics	36	5	40				
B. Di.			Geometry	36	5	35	English	144	5	35	Bookkeeping	18	5	45
			Arithmetic	36	5	35	Physiology	18	5	35	Word Analysis	18	5	30
			General Hist.	36	5	35	Political Econ.	18	5	30	Geology	18	5	35
			U. S. History	36	5	35	English History	18	5	30	Reviews	18	5	35
			Civics	18	5	35	Latin	105	5	35				
			Physical Geog.	36	5	35								
B. S.			Algebra	54	5	5	Physical Geog.	18	5	5				
B. Di.			Geometry	54	5	5	Physics	36	5	5	Latin Begin...	144	5	45
B. L., M. L.			Arithmetic	18	5	45	English	144	5	45				
			General Hist.	36	5	45	Physiology	18	5	5	German	72	5	45
			U. S. History	18	5	45	Political Econ.	18	5	5	Eng. History	18	5	45
			Civics of U. S.	18	5	45	Botany	18	5	5	Zoology	18	5	45
B. S. D.			Algebra	44	5	35	Latin	105	5	35	Surveying or			
A. B.			Geometry	55	5	35	Orthography	144	5	15	Higher Alg.	19	5	75
			Arithmetic	72	5	35	Trig. or higher				Geology or Ger	19	5	35
			General Hist.	36	5	35	Algebra	17	5	35	Anc. Lit. or Psy.	19	5	35
			U. S. History	36	5	35	Eng. or Latin	3	5	35	Etymology	24	5	35
			Civics of U. S.	18	5	35	Zoology or Ger.	17	5	35	Botany	12	5	35
			Physical Geog.	36	5	35	Ancient Lit. or				Agriculture	8	5	35
			Physics	36	5	35	Vocal Music	17	5	35	Elocut. and Lit.	16	5	35
			English	18	5	35	U. S. History	18	5	40	English	108	5	40
			Physiology	35	5	35	Civics	18	5	40	Physiology	18	5	40
			Political Econ.	9	5	35	Physical Geog.	18	5	40	Botany	18	5	40
Ph. B.			Algebra	54	5	40	Physics	36	5	40	Latin	144	5	40
Ph. B.			Geometry	54	5	40	Physical Geog.	18	5	40	Zoology	18	5	40
			Arithmetic	18	5	40	English	144	5	40	Latin-First year	36	5	40
			Gen. History	36	5	40	Political Econ.	18	5	40	Cicero	36	5	40
			Civics	36	5	40	Botany	18	5	40	Elementary Ag.	18	5	40
Ph. B.			Algebra	54	5	40	Physics	36	5	40	Physical Geog.	18	5	40
			Geometry	36	5	40	English	90	5	40	Physiology	18	5	40
			Arithmetic	18	5	40	Latin	144	5	40	English	36	5	40
			Gen. History	36	5	40	Zoology	18	5	40	Political Econ.	18	5	40
			Civics	18	5	40	Civics	17	5	35	English Lit.	18	5	40
B. Di.			Algebra	54	5	40	Physical Geog.	17	5	35	Botany	17	5	35
			Geometry	54	5	40	English	90	5	40	Book-Keeping	17	5	35
			Arithmetic	18	5	40	Physics	36	5	35	English History	17	5	35
			Gen. History	54	5	35	English	85	5	35	Latin-First year	34	5	35
			U. S. History	36	5	40	Physiology	17	5	35	Cicero	34	5	35
			Civics	18	5	40	Physical Geog.	28	5	35	Geology	18	5	35
			Algebra	51	5	35	Physics	36	5	35	Chemistry	18	5	35
			Geometry	34	5	35	English	108	5	35	Latin	108	5	35
			Arithmetic	31	5	35	Political Econ.	20	5	35	German	86	5	35
			Gen. History	34	5	35	Book-Keeping	20	5	35				
			U. S. History	17	5	35								
			Algebra	52	5	35								
			Geom. - Plane	36	5	35								
			Geom. - Solid	31	5	35								
			Gen. History	52	5	35								
			Civics of U. S.	16	5	35								

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Alta.....	L. D. Curtis .....	5	S. U. I .....	I. S. N. S. 4 .....	Upper Iowa Uni. 2
	Rose Ferguson.....	7	S. U. I. 2 .....	I. S. N. S. 2 .....	
	Stella Pence.....	4		I. S. N. S. 1 .....	
Alton .....	F. E. Fuller.....	6	Albton Col. 4 (Mch.) .....		
	Julia Winston .....	7	Upper Iowa U. 5. ....		
	Ruth Beem.....	6		I. S. N. S. 1 Sp. Ter. ....	
Ames. ....	Ethyl Ocasna .....	3	I. S. O. 4 .....		
	Margaret W. Cooper. ....	6	S. U. I. 4 .....		
	Ethel B. Randall.....	7	I. S. O. 4 .....		
	Anna W. Field.....	7	Iowa Col. 5. ....		
	I. J. Scott.....	7	I. S. O. 4; Drake 3 .....		
	Glendora McCord.....		Drake 2; I. S. O. 1 .....		
			LeLand Sta. 1. ....		
	Edith J. Bailey.....			I. S. N. S. 2 .....	
	Clara A. Boss.....		S. U. I. 1½ .....	I. S. N. S. 3 .....	
Anita. ....	H. W. Chebrook.....	5	Drake 3 .....		Nora Springs 3 ...
	Florence Splieth.....	7	Drake 3 .....		
	Delay E. Turner.....	3		I. S. N. 2½ .....	
	Katherine Jenkins.....	2	S. U. I. 1 .....		Den. T. S. ½ yr..
Anamosa..	O. E. Buckley.....	3	Univ. of Chicago. ....	I. S. N. S. ....	
	Laura Huffman.....	6	Cornell.....		
	Harriet Cunningham.....	5		I. S. N. S. ....	
	Jennie Forward.....				Lenox.....
Atlantic...	Carlos M. Cole.....	2	Iowa College 4 .....		
	Nellie L. Baldwin.....	4	Des Moines Col. ....		
	Anna E. Temple.....	6	Univ. of Chicago .....		
			Mt. Holyoke 4 .....		
	Laura Anderson.....	4	S. U. I. 4 .....		
	Carrie Wilken.....	5	Cornell (la.) 4 .....		
	Ethel Smith.....	5	Ohio Northern University 2 .....		
Andubon..	F. J. Manta.....	5	S. U. I. 4 .....		
	Ella Stearns.....	5		I. S. N. S. 5. ....	
	Vera Miles.....	7	State College 4. ....		
	Avis Gordon.....	5	S. U. I. 4 .....		
Avoca.....	M. E. Crosier.....	3			High Park Col. 1. Arm Institute 3.
	Bertha V. Wyant.....	6		I. S. N. S. 4 .....	
	Emma Sherrett.....	7		I. S. N. S. 3 .....	
	Hester Sanders.....	7	Iowa College 4 .....		

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Y'rs experience in H.S.	High School Courses.											
			Branches studied.			Branches studied.			Branches studied.			Branches studied.		
				Number weeks.	Rec. per week.		Number weeks.	Rec. per week.		Number weeks.	Rec. per week.		Number weeks.	Rec. per week.
					Rec. period.			Rec. period.			Rec. period.			Rec. period.
M. Di.		5	Algebra	54	1 40	Civics	18	54	Political Econ.	18	5 40			
B. Di.		5	Geometry	36	5 40	Physical Geog.	18	54	Botany	18	5 40			
		4	Arithmetic	18	5 40	Physics	36	54	Astronomy	18	5 40			
			General Hist.	36	5 40	English	144	54	Book-Keeping	18	5 40			
			U. S. History	36	5 40	Physiology	36	54	Latin	72	5 40			
A. B.		5	Algebra	72	5 40	Physics	36	54	Book-Keeping	20	5 40			
Ph. B.		1	Geometry	54	5 40	English	44	54	Word Analysis	16	5 40			
		1	Arithmetic	18	5 40	Political Econ.	30	54	Botany	20	5 40			
			General Hist.	54	5 40	Latin	128	54	Reviews & Elect.	52	5 40			
			Civics	18	5 40									
			Physical Geog.	20	5 40									
B. Sc.		1	Algebra	54	5 40	Latin	144	54	Algebra (Extra)	18	5 40			
B. Ph.		5	Geometry	36	5 40	Physiology	18	54	German	72	5 40			
B. Sc.		7	Arithmetic	18	5 40	Com. Geography	18	54	U. S. Hist.—Adv.	18	5 40			
Ph. B. A. M.		1	General Hist.	36	5 40	Word Anal. and			Ancient History	36	5 40			
B. S., L. L. B.		6	Civics	18	5 40	English Comp.	36	54	Modern History	36	5 40			
			Physical Geog.	18	5 40	German	72	54	Zoology	18	5 40			
			Physics	36	5 40	Electives—			Eag. Literature	36	5 40			
A. B.			English	10	5 40	(Four credits			Am. Literature	36	5 40			
B. Di.		2	Political Econ.	18	5 40	must be se-			Book-Keeping	36	5 40			
M. Di.		12	Botany	72	5 40	lected).....								
		5	Algebra	72	5 40	Physical Geog.	18	54	Geography	4	5 40			
B. Pe.			Geometry	36	5 40	Physics	36	54	Read'g & Spell'g	2	5 40			
B. D.			Arithmetic	18	5 40	English	144	54	Music	36	5 40			
			General Hist.	36	5 40	Physiology	18	54	Latin	72	5 40			
			U. S. History	18	5 40	Political Econ.	18	54						
			Civics	18	5 40	Book-Keeping	18	54						
			Algebra	54	5 40	Physics	36	54	Zoology	18	5 40			
			Geometry	54	5 40	English	144	54	Book-Keeping	18	5 40			
			Arithmetic	18	5 40	Physiology	18	54	Com. Geog.	18	5 40			
			General Hist.	18	5 40	Political Econ.	18	54	Botany	18	5 40			
			U. S. History	18	5 40	Latin	144	54	German	72	5 40			
			Civics	18	5 40									
			Physical Geog.	18	5 40									
A. B.		10	Algebra	54	5 40	Physics	36	54	Ger. Lessons	36	5 40			
Ph. B. A. M.		4	Geometry	54	5 40	English Lit.	144	54	German 2nd yr.	36	5 40			
			Arithmetic	18	5 40	Physiology	18	54	Book-keeping	36	5 40			
		20	General Hist.	36	5 40	Political Econ.	18	54	Com. Law	18	5 40			
Ph. B.		4	U. S. History	18	5 40	Botany	18	54	Com. Geog.	18	5 40			
A. B.			Civics	18	5 40	Latin	144	54	German	144	5 40			
			Physical Geog.	18	5 40									
B. S. B. Ped.														
B. S.		4	Algebra	54	5 35	English	144	535						
			Geometry	54	5 35	Political Econ.	18	535	German	72	5 35			
Ph. B.		2	Civics	18	5 35	Gk. and Rom. His.	36	535	English History	18	5 35			
Ph. B.		1	Physical Geog.	18	5 35	Latin	144	535	Book-keeping	18	5 35			
			Physics	36	5 35									
M. Di.		15	Algebra	54	5 40	Latin	72	540	Bus. Methods	18	5 40			
B. Di.		10	Geom.—Plane	36	5 40	German	72	540	Book-keeping	18	5 40			
B. Di.		8	General Hist.	36	5 40	Geometry—Solid	18	540	Bus. Arith.	18	5 40			
Ph. B.			Physics	36	5 40	English Gram.	18	540	Com. Geog.	18	5 40			
			English	10	5 40	Geometry—Solid	18	540	Com. Law	18	5 40			
			Latin	72	5 40	Arithmetic	18	540	Civics	18	5 40			
			German	72	5 40	Physiology	18	540	Economics	18	5 40			
			Latin	72	5 40	Economics	18	540	Spelling	36	4 20			
			German	72	5 40				Peamanship	18	4 20			

## HIGH SCHOOL STASTICS

High school.	Name of instructors.	Number rec. periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Albia.....	F. E. George .....	3	Upper Iowa U. 5 Howard Univ'ty 1		
	Maisy Schreiner .....	6	I. W. U. 4		
	Myrta Harlew .....	6			4 summer terms Univ. of Minn.
	Etta J. Eldier .....	6	S. U. I. 3	I. S. N. S. 3	
	Lettie E. Shepherd .....	6	Hastings College (Nebr.)		
Alden.....	Macy Oambell .....	6		I. S. N. S. 4	
	Olementine Runnel .....	7	Iowa College 3½		
	Mabel Whitney .....	6		I. S. N. S. 3	
Algona ..	Ada E. Smith .....	7	U. of Minn. 5		
	Hilda G. Lundin .....	7		I. S. N. S. 2½	
	Louise McCoy .....	6	U. of Minn. 5		
	M. J. Ooate .....	6	U. of Mich. 2		
Allerton ..	J. F. Holliday .....	8		Mo. State N. 4	Univ. extension work 2 years..
	J. R. Jenison .....	8	Tarkio College 5		
	Myrtle Duncan .....	7		I. S. N. S. 1 term	
Ashley....	Laura M. Graves .....	7	S. U. I. 4		
	Bertha M. Denny .....	7	Drake 4		
Adair .....	Lula E. Hohanshelt .....	3	Simpson Col. 3		
	Winifred E. Duffy .....	5	Drake 3	Minn. St. Nor. 1	
	Mrs. W. H. Skitt (Music) ..	1			
Afton.....	Geo. D. Eaton .....	4		I. S. N. S. 3	
	Miss Ethel Rundolph .....	5	U. of Chicago 1		Corning Acad. 2
	Miss Ruby O. Ramedell .....	7	Iowa College 3		
	Miss Elsie Welty .....	8			Valparaiso 3
Agency ...	C. F. Goltry .....		Drake 4 S. U. I. 3 mo.		Shen. Nor. Col. 3 mo. ....
	Olara C. Goltry .....		Drake 1		Chariton Acad. 1
Akron.....	O. J. Smith .....	8			North Western Nor. Le Mars 4
	F. S. Schmalle .....	8			North Western Nor. Le Mars 2

The figure following the name of the institution indicates years attended.

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yrs experience in U.S.	High School Courses.											
			Branches studied.			Branches studied.			Branches studied.			Branches studied.		
			Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
M. Acc't			63	5	35	Botany	18	5	5	Physiology	18	5	35	
B.S., M.S., A.B.			54	5	35	Eng. History	18	5	35	Eng. Grammar	18	5	35	
A.M., Ph.D., Ph.M.			9	5	35	Bookkeeping	18	5	35	Com. Arith'etic	18	5	35	
A.B., A.M.			30	5	35	Latin	144	5	35	Civics U. S.	18	5	35	
			16	5	35	U. S. History	18	5	35	Geology	18	5	35	
Ph. B., M. Di.			3	5	35	Physical Geog.	18	5	35	Political Econ.	18	5	35	
A. B.			144	5	35	Physics	18	5	35					
						English	144	5	35	Zoology	18	5	35	
										Commercial law	18	5	35	
M. Di.			1	5	35	Physics	3	5	40					
			2	5	35	English	12	5	35	Bookkeeping	18	5	45	
E. Di.			5	5	35	Physiology	1	5	35	Word Analysis	18	5	30	
						Political Econ.	18	5	35	Geology	18	5	35	
						U. S. History	18	5	35	Reviews	18	5	35	
						Civics	18	5	35					
						Physical Geog.	36	5	35	Latin	10	5	35	
E. S.			14	5	35	Algebra	54	5	35	Physical Geog.	18	5	35	
E. Di.			11	5	35	Geometry	54	5	35	Physics	3	5	35	
E. L., M. L.			10	5	35	Arithmetic	18	5	35	English	12	5	35	
						General Hist.	36	5	35	Physiology	18	5	35	
						U. S. History	18	5	35	Political Econ.	18	5	35	
						Civics of U. S.	18	5	35	Botany	18	5	35	
B. S. D.			2	5	35	Algebra	44	5	35	Latin	108	5	35	
A. B.			2	5	35	Geometry	54	5	35	Surveying or	19	5	35	
						Arithmetic	72	5	35	Higher Alg.	19	5	35	
						General Hist.	36	5	35	Geology or Ger	19	5	35	
						U. S. History	36	5	35	Anc. Lit. or Psy.	19	5	35	
						Civics of U. S.	12	5	35	Trig. or higher	17	5	35	
						Physical Geog.	7	5	35	Algebra	17	5	35	
						Physics	86	5	35	Eng. or Latin	3	5	35	
						English	184	5	35	Zoology or Ger.	17	5	35	
						Physiology	35	5	35	Agriculture	8	5	35	
						Political Econ.	9	5	35	Elocut. and Lit.	16	5	35	
										Vocal Music	17	5	35	
Ph. B.			1	5	40	Algebra	51	5	40	U. S. History	18	5	40	
Ph. B.			2	5	40	Geometry	54	5	40	Civics	18	5	40	
						Arithmetic	18	5	40	Physical Geog.	18	5	40	
						Gen. History	33	5	40	Physics	30	5	40	
Ph. B.						Algebra	54	5	40	Physical Geog.	14	5	40	
						Geometry	36	5	40	Physics	30	5	40	
						Arithmetic	14	5	40	English	14	5	40	
						Gen. History	6	5	40	Political Econ.	18	5	40	
						Civics	36	5	40	Botany	18	5	40	
B. Di.			5	5	40	Algebra	51	5	40	Physics	86	5	40	
						Geometry	54	5	40	English	90	5	40	
						Arithmetic	18	5	40					
						Gen. History	54	5	35	Latin	144	5	40	
						U. S. History	36	5	40	Zoology	18	5	40	
						Civics	1	5	40					
						Algebra	51	5	35	Civics	17	5	35	
						Geometry	34	5	35	Physical Geog.	17	5	35	
						Arithmetic	31	5	35	Physics	81	5	35	
						Gen. History	34	5	35	English	85	5	35	
						U. S. History	17	5	35	Physiology	17	5	35	
						Algebra	57	5	35	Physical Geog.	28	5	35	
						Geom. - Plane	36	5	35	Physics	36	5	35	
						Geom. - Solid	31	5	35	English	108	5	35	
						Gen. History	52	5	35	Political Econ.	20	5	35	
						Civics of U. S.	16	5	35	Book-Keeping	20	5	35	

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Alta.....	L. D. Curtis .....	5	S. U. I .....	I. S. N. S. 4 .....	Upper Iowa Uni. 3
	Rose Ferguson.....	7	S. U. I. 2 .....	I. S. N. S. 3 .....	
	Stella Pence.....	4		I. S. N. S. 1 .....	
Alton .....	F. E. Fuller.....	6	Albion Col. 4 (Moh.) .....		
	Julia Winston.....	7	Upper Iowa U. 5.		
	Ruth Beem.....	6		I. S. N. S. 1 Sp. Ter. ....	
Ames. ....	Ethyl Cesana.....	8	I. S. C. 4 .....		
	Margaret W. Cooper.....	6	S. U. I. 4 .....		
	Ethel B. Randall.....	7	I. S. C. 4 .....		
	Anna W. Field.....	7	Iowa Col. 5.....		
	I. J. Scott.....	7	I. S. C. 4; Drake 3 .....		
	Glendora McOord.....		Drake 2; I. S. C. 1 .....		
			LeLand Sta. 1. ....		
	Edith J. Bailey.....			I. S. N. S. 2 .....	
	Clara A. Boss.....		S. U. I. 1½.....	I. S. N. S. 3 .....	
Anita ....	H. W. Chebrook.....	5	Drake 3.....		Nora Springs 3...
	Florence Spieth.....	6	Drake 3.....		
	Jaisy E. Turner.....	3		I. S. N. S. ½ .....	
	Katherine Jenkins.....	2	S. U. I. 1 .....		
Anamosa..	O. E. Buckley.....	3	Univ. of Chicago.....	I. S. N. S. ....	Lenox.....
	Laura Huffman.....	6	Cornell.....		
	Harriet Cunningham.....	5		I. S. N. S. ....	
	Jennie Forward.....				
Atlantic..	Carlos M. Cole.....	2	Iowa College 4.....		
	Nettie L. Baldwin.....	4	Des Moines Col. ....		
	Anna E. Temple.....	6	Univ. of Chicago .....		
			Mt. Holyoke 4.....		
	Laura Anderson.....	4	S. U. I. 4.....		
	Carrie Wilken.....	5	Cornell (Ia.) 4.....		
Audubon..	Ethel Smith.....	5	Ohio Northern .....		
			University 2.....		
	F. J. Mantz.....	5	S. U. I. 4 .....		
	Ella Stearns.....	5		I. S. N. S. 3.....	
	Vera Miles.....	7	State College 4.....		
Avoca.....	Avis Gordon.....	5	S. U. I. 4 .....		High Park Col. 1. Arm Institute 2.
	M. E. Crosier.....	3			
	Bertha V. Wyant.....	6		I. S. N. S. 4 .....	
	Emma Sherrett.....	7		I. S. N. S. 3.....	
	Hester Sanders.....	7	Iowa College 4 .....		

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yrs experience in H.S.	High School Courses.											
			Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
M. Di.....		5	Algebra.....	54	1	40	Civics.....	18	54		Political Econ....	18	5	40
B. Di.....		5	Geometry.....	36	5	40	Physical Geog....	18	54		Botany.....	18	5	40
		4	Arithmetic.....	18	5	40	Physics.....	36	54		Astronomy.....	18	5	40
			General Hist....	36	5	40	English.....	144	54		Book-Keeping....	18	5	40
			U. S. History....	36	5	40	Physiology.....	36	54		Latin.....	72	5	40
A. B.....		8	Algebra.....	72	5	40	Physics.....	36	54		Book-Keeping....	20	5	40
Ph. B.....		1	Geometry.....	55	5	40	English.....	44	54		Word Analysis....	16	5	40
		1	Arithmetic.....	13	7	4	Political Econ....	36	54		Botany.....	20	5	40
			General Hist....	55	5	40					Reviews & Elect	52	5	40
			Civics.....	16	1	40	Latin.....	128	54					
			Physical Geog.	21	5	40								
B. Sc.....		1	Algebra.....	54	5	40	Latin.....	144	54		Algebra (Extra)...	18	5	40
B. Ph.....		5	Geometry.....	36	5	40	Physiology.....	18	54		German.....	72	5	40
B. Sc.....		7	Arithmetic.....	18	5	40	Com. Geography....	18	54		U. S. Hist.—Adv..	18	5	40
Ph. B. A. M.....		1	General Hist....	31	5	40	Word Anal. and				Ancient History...	36	5	40
B. S. L. L. B.....		6	Civics.....	18	5	40	English Comp....	36	54		Modern History...	36	5	40
			Physical Geog.	13	5	40	German.....	72	54		Zoology.....	18	5	40
A. B.....			Physics.....	36	5	40	Electives—				Eng. Literature...	36	5	40
B. Di.....		2	English.....	10	5	40	(Four credits				Am. Literature....	36	5	40
M. Di.....		12	Political Econ....	18	5	40	must be se-				Book-Keeping....	36	5	40
			Botany.....	18	5	40	lected).....							
		9	Algebra.....	72	5	40	Physical Geog....	18	54		Geography.....	4	5	40
B. Pe.....			Geometry.....	36	5	40	Physics.....	36	54		Read'g & Spell'g	2	5	40
B. D.....			Arithmetic.....	12	5	40	English.....	144	54		Music.....	36	5	40
			General Hist....	36	5	40	Physiology.....	18	54		Latin.....	72	5	40
			U. S. History....	18	5	40	Political Econ....	18	54					
			Civics.....	18	5	40	Book-Keeping....	18	54					
			Algebra.....	54	5	40	Physics.....	36	54		Zoology.....	18	5	40
			Geometry.....	51	7	40	English.....	144	54		Book-Keeping....	18	5	40
			Arithmetic.....	18	5	40	Physiology.....	18	54		Com. Geog.....	18	5	40
			General Hist....	18	5	40	Political Econ....	18	54		Botany.....	18	5	40
			U. S. History....	18	5	40	Latin.....	144	54		German.....	72	5	40
			Civics.....	18	5	40								
			Physical Geog.	18	5	40								
A. B.....		10	Algebra.....	54	5	40	Physics.....	36	54		Ger. Lessons....	36	5	40
Ph. B. A. M.....		1	Geometry.....	54	5	40	English Lit.....	144	54		German 2nd yr..	36	5	40
			Arithmetic.....	18	5	40	Physiology.....	18	54		Book-keeping....	36	5	40
		20	General Hist....	36	5	40	Political Econ....	18	54		Com. Law.....	18	5	40
Ph. B.....		4	U. S. History....	18	5	40	Botany.....	18	54		Com. Geog.....	18	5	40
A. B.....			Civics.....	18	5	40	Latin.....	144	54		German.....	144	5	40
			Physical Geog.	18	5	40								
B. S. B. Ped.....														
B. S.....		4	Algebra.....	54	5	35	English.....	144	535					
		2	Geometry.....	54	5	35	Political Econ....	18	535		German.....	72	5	35
Ph. B.....			Civics.....	18	5	35	Gk. and Rom. His.	36	535		English History	18	5	35
Ph. B.....		1	Physical Geog.	18	5	35	Latin.....	144	535		Book-keeping....	18	5	35
			Physics.....	36	5	35								
			Algebra.....	54	5	40								
M. Di.....		15	Geom.—Plane....	36	5	40	Latin.....	72	540		Bus. Methods....	18	5	40
B. Di.....		10	General Hist....	36	5	40	German.....	72	540		Book-keeping....	18	5	40
B. Di.....		8	Physics.....	36	5	40	Geometry-Solid..	18	540		Bus. Arith.....	18	5	40
Ph. B.....			English.....	10	5	40	English Gram....	18	540		Com. Geog.....	18	5	40
			Latin.....	72	5	40					Com. Law.....	18	5	40
			German.....	72	5	40	Geometry-Solid..	18	540		Civics.....	18	5	40
							Arithmetic.....	18	540		Economics.....	18	5	40
			Latin.....	72	5	40	Physiology.....	18	540		Spelling.....	36	4	20
			German.....	72	5	40	Economics.....	18	540		Peamanship....	18	4	20

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Barns City	F. W. Cover.....	9	.....	I. S. N. S. 1.....	.....
	Mr. Boatman.....	2	.....	.....	Penn. Col. 1.....
Battle Creek..	W. B. Munson.....	6	Simpson College 2	.....	.....
	Wilson Jones.....	8	Cornell College 2.	Wis. State Nor. 2	.....
Bedford...	Elizabeth Carrington.....	.....	Univ. of Chi. 1½	.....	Valpariso 8, Bap. Col. Burl. 1..
	Lillian C. Meyerhoff.....	7	State Univ. Neb. 2	.....	.....
	W. A. Terrall.....	7	Simpson 1. Cornell Col. 4	.....	.....
Belle Plaine	W. J. Dean.....	2	Pen Col. 6	I. S. N. S. 1.....	.....
	Francis Merrill.....	4	Univ. of Mich. 4..	.....	.....
	Nellie Johnson.....	6	.....	I. S. N. S. 4.....	.....
	Agnes Woravec.....	6	S. U. I. 4.....	.....	.....
	Mrs. W. J. Dean.....	6	.....	I. S. N. S. 1.....	.....
Belmond..	Frank Popham.....	5	S. U. I. 1	.....	.....
	Jennie McCormack.....	5	La. Wesleyan 1..	I. S. N. S. 4.....	Nor'n Ind. Nor. 2
	Olive Dickerson.....	3	Oce College 4.....	I. E. N. S. 4.....	.....
	Emily Johnson.....	3	.....	.....	.....
Brimingham.	F. S. Hill.....	10	I. S. N. S. 8.....	.....	.....
	O. E. Williams.....	10	I. W. U. 2.....	.....	.....
Blockton..	S. Johnson.....	8	Drake 2.....	.....	Telford's Collegiate Academy, 2
	Mamie Zaelke.....	7	.....	.....	Shenandoah Col..
Bloomsfield	Wilbur York.....	3	Drake 2.....	I. S. N. S. 2.....	Southern I. N. 2½
	James Westhoff.....	5	.....	.....	S. I. N. 2½.....
	Anna Duffield.....	6	Drake 1½	.....	S. I. N. 2.....
	Bessie Barnett.....	6	Drake ¼	.....	Highland Park 1
Bonaparte	J. H. Vos.....	9	State Univ. of Nebr. 8½	.....	Lincoln, (Neb.) Normal 2.....
	Susan Wehn.....	8	Wesleyan Univ. (Nebr.) 2.....	.....	Cameron Col. Mo. ½ Illinois Woman's Col. 1.

## —FOUR YEAR COURSES.

Preparation.		Yr's experience in H.S.	High School Courses.											
Degrees held.			Branches studied.			Number weeks.	Rec. per week.	Rec. period.	Branches studied.			Number weeks.	Rec. per week.	Rec. period.
			Algebra	58	5	35	Civics	36	5	30	Political Econ.	18	5	45
			Geom. Plane	36	5	35	Physical Geog.	18	5	35	Botany	18	5	45
			Arithmetic	18	5	45	Physics	36	5	45	Book-keeping	18	5	45
			General Hist.	36	5	45	English	62	2	35	Word Anal.	18	5	30
			U. S. History	8	5	45	Physiology	20	5	40	Latin	144	5	30
A. B.			Algebra	54	5	45	Civics	18	5	45	Political Econ.	18	5	45
			Geometry	54	5	45	Physical Geog.	18	5	45	Botany	18	5	45
			Arithmetic	36	5	45	Physics	36	5	45	Book-keeping	18	5	45
			General Hist.	36	5	45	English	62	2	45	Economics	18	5	45
			U. S. History	36	5	45	Physiology	18	5	45	Latin	72	5	45
B. S.			Algebra	54	5	40	Physics	36	5	45				
			Geometry	54	5	40	English	144	5	35	Etymology	18	5	45
			Arithmetic	18	5	35	Political Econ.	18	5	40	Book-keeping	18	5	40
			General Hist.	36	5	35	Botany	18	5	40	Eng. History	18	5	40
B. A.			U. S. History	36	5	35	Music	72	2	40	Geology	18	5	40
			Civics of U. S.	18	5	45	Latin	144	5	40				
			Physical Geog.	18	5	45								
			Algebra	54	5	40	Physical Geog.	36	5	40				
			Geometry	54	5	40	Physics	36	5	40	Book-keeping	18	5	40
			Arithmetic	36	5	40	English	136	5	40	Zoology	18	5	40
			General Hist.	36	5	40	Political Econ.	18	5	40	Geology	18	5	40
			U. S. Hist.	36	5	40					Astronomy	18	5	40
			Civics	54	5	40	Latin	44	5	40	Botany	36	5	40
B. D. M. A.			Algebra	54	5	40	Civics	18	5	40	Political Econ.	18	5	40
			Geometry	54	5	40	Physical Geog.	18	5	40	Botany	18	5	40
B. D.			Arithmetic	18	5	40	Physics	36	5	40	Book-keeping	18	5	40
			General Hist.	36	5	40	English	08	5	40	Latin	44	5	40
			U. S. History	18	5	40	Physiology	18	5	40				
			Algebra	48	5	30	Civics of U. S.	16	5	30	Botany	16	5	30
			Geometry	64	5	30	Physical Geog.	32	5	30	Book-keeping	16	5	30
			Arithmetic	16	5	30	Physics	32	5	30	Latin	96	5	30
			General Hist.	32	5	30	English	96	5	30				
			U. S. History	16	5	30	Political Econ.	16	5	30				
B. Pe.			Algebra	54	5	38	Civics	18	5	38	Political Econ.	18	5	38
			Geometry	36	5	38	Physical Geog.	18	5	38	Botany	18	5	40
			Arithmetic	36	5	38	Physics	36	5	45	Zoology	18	5	40
			General Hist.	36	5	38	English	126	5	38	Latin	108	5	38
			U. S. History	18	5	38	Physiology	18	5	38				
B. Pe., B. S.			Algebra	54	5	40	Physical Geog.	18	5	40	Chemistry	18	5	40
			Geometry	54	5	40	Physics	36	5	40	Zoology	18	5	40
B. S.			Arithmetic	18	5	40	English	108	5	40	Book-keeping	18	5	40
			Gen'l History	34	5	40	Physiology	18	5	40	Latin	72	5	40
			U. S. History	18	5	40	Political Econ.	18	5	40				
			Civics	30	5	40	Botany	18	5	40				
A. B., B. S.			Algebra	48	5	30	Physical Geog.	32	5	40	Book-keeping	32	5	30
			Geometry	48	5	40	Physics	32	5	30	Com. Law	16	5	30
			Arithmetic	48	5	30	English	122	5	40	Com. Arith.	16	5	30
			Gen'l History	54	5	30	Political Econ.	16	5	30	Geology	16	5	30
			U. S. History	16	5	30	Botany	32	5	30				
			Civics	32	5	30	Latin	64	5	30				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Boone ....	Marcus M. Beddall.....	4	Univ. of Wis. Graduate work addition'l Univ of Wis. & Univ of Chicago 1....	State Nor. Wis. 4	
	Eva M. White.....	6	Univ. of Iowa 3..	State Nor. Mo. 2½	
	Lydia Rolston.....	6	Cornell 4.....		
	Grace Aimee Reed.....	6	Maskington(O) Col 4 Univ. of Chicago ½		
	Maude A. Strubel.....	6	Cornell 8½	I. S. N. S. ¼	
	Lou Baker.....	5	Univ. of Ill. 2..	Nor. Ill. Nor. 2..	Nor. Univ. 3....
	Florence Freeman.....	5	Univ. of Mich 2½ Grad work Univ. of Mich 1..		
	May Gibson Shuck.....	5	Univ. of Iowa 4 Grad. work S. U. I. 1		
	J. L. Van Horn.....	6	Ohio Wesleyan Univ. 4..		
Brighton..	J. S. Goldthwaite.....	8	Des Moines Col. 2	I. S. N. S. 3..	
	June Emry.....			I. S. N. S. 2..	
Britt .....	B. W. Hoadley.....	5	Valparaiso 3..		
	Gertrude M. Carman.....	6	Northwestern 4..		
	Lillian O. Smith.....	6	Iowa Col. 4		
	Lucille E. Alexander.....	7	Greenville (Tenn) Univ. 4..		
Brooklyn..	Elizabeth Wyland.....	6	Iowa Col. 4..		
	Mary Wyland.....	7	Iowa Col. 4..		
	Mabel Talbott.....	6	Iowa Col. 2..		
Buffalo Center..	C. R. Golly.....	7		I. S. N. S. 3..	
	Abbie Langlin.....	8		I. S. N. S. 2..	
Burlington.....	Maurice Ricker.....	2	Drake Uni. 5....		Uni. Ill. & Mont
	Ewald Poppe.....	4	Breslau.....		
	Miss H. E. Warren.....	5			City Normal B'd 3
	Miss W. L. Hutchinson.....	5	Chicago Uni. 2..		City Normal B'd 3
	Miss Esther Jacobs.....	5			City Normal B'd 3
	W. Leo Jordon.....	5	Drake Uni 6....		Oak. Col.
	Dorothy Schultz.....	5	S. U. I. 3..		
	Myra Blake.....	5	Monmouth Col. 3		
	Francis Rogers.....	5	S. U. I. 4		Wellesley Col.
	O. W. Jarvis.....	5	S. U. I. 5....		
	Florence Chase.....	5	Vassar Col. 4..		
	W. L. Raymond.....	5	Iowa Col. 5		
	Newton Van Dalsen.....		Manual Training.		Menomence, Wis.
	Olive McKay.....		Manual Training.		Menomence, Wis.

**—FOUR YEAR COURSES.**

Preparation.		High School Courses.									
Degrees held.	Yrs experience in H.S.	Branch studied.	Number weeks.		Branch studied.	Number weeks.		Branch studied.	Number weeks.		
			Rec.	per week		Rec.	per week		Rec.	per week	
B. L. ....	5 1/2	Algebra .....	48	5 40	Latin .....	144	5 40	Zoology .....	18	5 40	
Ph. B., B. S. D. ....	5 1/2	Geometry .....	48	5 40	German .....	72	40	Book-keeping .....	18	5 40	
Ph. B. ....	5 1/2	Gen'l History .....	36	5 40	Six credits from the following:			Chemistry .....	36	5 40	
		U. S. History .....	18	5 40	Ancient History .....	36	5 40	Arithmetic .....	18	5 40	
		Physical Geog. ....	36	5 40	Geology .....	18	5 40	Eog. Gram. ....	18	5 40	
		Physics .....	36	5 40				Physiology .....	18	5 40	
		English .....	144	5 40				Political Econ. ....	18	5 40	
								Botany .....	18	5 40	
B. A. ....	3 1/2										
B. A. ....	3 1/2										
A. B. ....	1										
Ph. B., M. A. ....	3 1/4										
B. S. ....	1										
		Algebra .....	56	5 36	U. S. History .....	36	5 36	English .....	108	5 36	
		Geometry .....	52	5 36	Civics .....	36	5 36	Physiology .....	116	5 36	
		Arithmetic .....	3	5 36	Physical Geog. ....	24	5 36	Political Econ. ....	90	5 36	
		Gen'l History .....	36	5 36	Physics .....	36	5 36				
B. S. ....	14	Algebra .....	54	5 48	Physical Geog. ....	18	5 4	German .....	72	5 48	
Ph. D. ....		Geometry .....	54	5 48	Physics .....	36	5 48	Zoology .....	13	5 48	
Ph. D. ....		Arithmetic .....	18	5 48	English .....	126	5 4	Book-keeping .....	18	5 48	
		Gen'l History .....	36	5 48	Physiology .....	18	5 48	Eng. & Am. ....			
A. B. ....		U. S. History .....	18	5 48	Political Econ. ....	18	5 48	Classics .....	36	5 48	
		Civics .....	18	5 4	Botany .....	18	5 48				
A. B. ....	4	Algebra .....	54	5 4	Political Econ. ....	18	5 40	Vord Anal. ....	15	5 40	
Ph. B. ....	0	Geometry .....	54	5 4	Botany .....	18	5 40	Com. Arith. ....	36	5 40	
A. B. ....	2	Gen. History .....	36	5 40	Book-keeping .....	18	5 40	Com. Law .....	18	5 40	
		U. S. History .....	18	5 40	Latin .....	144	5 40	Reviews .....	18	5 40	
		Civics .....	18	5 40	Beginning Latin .....	36	5 40	Ele'tive in either course German. ....	36	5 40	
		Physical Geog. ....	36	5 40	Physiology .....	18	5 40				
		Physics .....	36	5 40							
		English .....	140	5 40							
B. Di. ....	1	Algebra .....	54	5 10	Physical Geog. ....	20	5 40	Com. Geo. ....	18	5 40	
B. Di. ....		Geometry .....	38	5 40	Physics .....	36	5 40	Physical Geog. ....	26	5 40	
		Arithmetic .....	18	5 40	English .....	134	6 00	Com. Law .....	12	5 40	
		Gen. History .....	36	5 40	Physiology .....	18	6 00	Word Analysis .....	18	5 40	
		U. S. History .....	32	6 00	Political Econ. ....	12	5 40	Latin .....	72	5 40	
		Civics .....	18	6 30	Botany .....	24	5 40				
B. S. ....	14	Algebra .....	57	5 45	Physiology .....	19	5 45	Stenography .....	76	5 45	
Ph. D. ....	86	Geometry .....	57	5 45	Political Econ. ....	19	5 45	Trigonometry .....	19	5 45	
	18	Arithmetic .....	19	5 45	Botany .....	19	5 45				
	10	Gen. History .....	38	5 45	Zoology .....	19	5 45	NOTE: Thirty-two credits necessary for graduation. Elective but at least two years of mathematics, two of language and three of English must be elected.			
	9	U. S. History .....	19	5 45	German .....	152	6 00				
A. B. ....	11	Civics .....	19	5 45	Latin .....	38	5 45				
A. B. ....	6	Physical Geog. ....	19	5 45	Chemistry .....	38	5 45				
A. B. ....	6	Physics .....	38	5 45	Book-keeping .....	37	5 45				
A. B. M. A. ....	10	English .....	114	5 45	Penmanship .....	19	5 45				
B. S. ....	2										
Ph. D. ....	3										
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## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Cantril....	Paul E. Wright.....	4	Drake 1.....	.....	Appleton City 4... Acad. (Mo.).....
	Grace Hale.....	6	I. W. U. 1.....	.....	.....
	Blanch Cassidy.....	6	.....	.....	.....
Capital Park... (Des Moines.)	J. R. McComb.....	3	Mo. Wesleyan 2 Tarkio 4...	I. S. N. S. 1/2.....	.....
	Elizabeth Haas.....	8	Callinan Drake.....	.....	Chicago Sum Sch. C. O. C. O..
	Eva Twombly.....	6	Des Moines Col. 4	.....	.....
	Virginia Hickey.....	5	Univ. of Chicago 1	.....	.....
	Roscoe B. Weaver.....	5	Drake.....	.....	.....
	Ivy K. Perdue.....	5	Simpson 4.....	.....	C. O. C. O. 2..
Carroll....	Mrs. E. B. Carroll...	.....	.....	I. S. N. S. 4.....	.....
	Makepeace Morris.....	.....	S. U. I. 5.....	.....	.....
	Grace Ferguson.....	.....	Ohio Univ 5.....	.....	.....
Carson....	John S. Coyle.....	8	I. S. O. 4.....	.....	.....
	Ethel Osler.....	9	.....	I. S. N. S. 4.....	.....
Cedar Falls	Amy Dougherty.....	3	Cornell Col. 4.....	.....	.....
	Miriam Brooks.....	5	Iowa Wes. 4.....	.....	.....
	Laura Phillips.....	6	Cornell 4.....	I. S. N. S.....	.....
	Laura Kingman.....	6	.....	I. S. N. S. 8 1/2.....	.....
	Eloise Waring.....	5	Univ. Mo. 44.....	.....	.....
	Alice Cramer.....	6	.....	I. S. N. S. 2 1/2.....	.....
	Lillian Getty.....	6	.....	Nebr. Nor. 2.....	Lincoln Bus. Col.1
Cedar Rapids..	Abbie S. Abbott, Principal	.....	Nor. School Salem Mass Univ. Chi	.....	.....
	Louise Barker.....	5	Univ. Michigan.....	.....	.....
	John Cameron.....	4	S. U. I.....	I. S. N. S.....	.....
	Elen Clemens.....	4	Northwestern.....	.....	.....
	Elizabeth M. Cook.....	4	Co. Col. U. of Chi	.....	Bus. Col. ....
	Isabel Dutil.....	5	.....	.....	.....
	W. Fritz Duhl.....	6	Gery U. of Chi.....	.....	.....
	Emma Fordyce.....	5	.....	.....	.....
	Anna Fisher.....	5	U. of Chi.....	.....	.....
	Earnest Hartwell.....	5	Albion.....	.....	.....
	Ina Hibbard.....	5	.....	.....	Bus. Col. ....
	Virginia Knox.....	5	Wellesley Grin.....	.....	.....
	Carrie M. Palmer.....	4	U. of Michigan.....	.....	.....
	Lucile Powell.....	5	Shepardson U. Chi	.....	.....
	Gertrude Prescott.....	5	Cornell.....	.....	.....
	Lewis Robey.....	5	Wabash.....	.....	.....
	Alice Rudd.....	5	Cornell.....	.....	.....
	Mae Schermund.....	5	U. of Michigan.....	.....	.....
	A. Clyde Slifer.....	5	Ames.....	.....	.....
	Dewitt C. Sprague.....	5	Grinnell.....	.....	.....
	Carrie M. Wildey.....	5	Grinnell.....	.....	.....
	Rachel E. Witmer.....	5	Co. Univ. of Chi.	.....	.....



## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Center Point	Leo H. Paulger.....	7	Cornell Col. 4.....		
	Margaret Gilchrist.....	8	U. of Chi. 1.....	I. S. N. S. 2.....	Columbia School. Oratory (Chi). Grad.....
Center-ville..	E. N. Gibson.....	1	S. U. I., 1 sum.	I. S. N. S. 2.....	
	Orsini V. Swift.....	4			Bloomfield Nor 1. North. Ind. Nor. 2
	Eunice Meers.....	6	Drake Uni. 4.....		
	Florence Hoefner.....	6	Uni. Minn. 1/2.....		Chas. Cy. Col. 2..
	Florence Van Dike.....	6	Iowa Col. 4.....		
	J. Crete Pyrmont.....	6	Coe Col.....		
	T. B. Young.....	6	Parsons Col. 2.....		
	Janet Wilson.....	6		I. S. N. S. 2.....	
Central City..	H. M. Taylor.....	8			Drake 2 1/2.....
	Myrtle Metcalf.....	8	Cornell 4.....		
Chariton..	Mrs. L. M. Gaw.....	6	Uni. Kansas.....	I. S. N. S.....	
	Nellie Darby.....	7	Uni. Chicago 6.....		
	Leuise Singer.....	6			
	Adda Manning.....	7	Drake Uni.....		
Charles City..	Fannie R. Wilson.....	3	I. S. T. A. 4.....	Mass. State Nor. 2.....	
	Elizabeth Carmichael.....	1	Quincy Com. 4.....		
	Agnes Case.....	5	Wisconsin Uni. 4.....		
	Jay T. Colgrove.....	6	Simpson 2.....	I. S. N. S. 3.....	
	Gladys I. Goddard.....	6	Olivet Michigan 4.....		
	G. W. Hageman.....	6	Uni. of Mo. & Central Wis. 2.....		
	Alberta Hoffman.....	5		I. S. N. S. 2.....	
	O. N. Olesen.....	4	Battle Creek 2.....	I. S. N. S. 4.....	
	Edith A. Reid.....	1	Col. Sch. Oratory 2.....		
	Oswald Riser.....	4	Bithel Col. 1. Ia. Col. 4.....		Denmark Acad. 3
Charter Oak..	Walter Mitchell.....	7		I. S. N. S. 3 1/2.....	
	Clara Pearl Hayden.....	8		I. S. N. S. 2.....	
Cherokee..	A. V. Storm, Supt.....	1	Ill. Wesleyan U. 4.....		
	Martha Roberts, Principal.	8	S. U. I. 2 summers.....	Neb. Nor. 1 sum. I. S. N. S. 3 sum.	
	Estella Boot.....	5	Uni. S. D. 4 S. U. I. 1 summer.....		
	Charlotte Lorenz.....	6	S. U. I. 2.....		
	Fatella Ducker.....	6	Uni. Neb. 4.....		
	H. B. Clarke.....	6	Coe Col.....		
	A. O. Gordon.....	6	S. U. I. 4.....		



## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Clarinda...	Frank W. Perkins.....	8	.....	I. S. N. S. 4	.....
	Jessie L. Canning .....	8	.....	I. S. N. S. 4	.....
	Mary Berry .....	8	.....	Kan. State Nor. 4	U. of Chicago ½
	Mrs. Fred Loran .....	8	.....	.....	.....
	Mabel Stone.....	6	Simpson Col. 4	.....	.....
Clarion...	W. H. Blakely .....	4	Gen. U. S. S. U. I. 2	.....	Iowa City Acad. 1
	Nan Maughlin .....	6	Markio College 1	.....	Washington A. 1.
	Ruth Browne .....	6	U. of Neb. 1	.....	.....
	Mary Cruikshank .....	6	Iowa Col. 4	.....	.....
Clarksville	Everett A. Reynolds.....	8	U. of Wis. 3	Oakosh. Wis., N. 4	.....
	Gertrude M. Heery .....	8	Ann Arbor 8 U. of Chicago ½	.....	Spencer B. O. S. M. St. Joseph 6 (Tentopolis)
	Geo. J. Lux.....	8	U. of Chicago 1	.....	.....
Clearfield.	E. O. Heaton.....	6	Labor College 1 Simpson Col. 3	.....	Simpson Bus. C. ½ Afion N. & B. C. 2 ½
	Maud Nelson .....	7	.....	I. S. N. S. 2	.....
	Eva C. Brown .....	4	.....	I. S. N. S. 2	.....
Clear Lake	L. W. Hicks, Supt.....	4	Cornell Col. 5	.....	Uni. of Chicago (Post Graduate) Highland Park C.
	Susan McCoy, Principal....	6	U. of Chicago 1	.....	.....
	Evelyn Wilson.....	7	Iowa Col. 4	.....	.....
	Eileen Olson .....	1	.....	I. S. N. S.	.....
Clinton...	J. S. McCowan.....	4	Iowa Col. 5 U. of O. 2 sum.	.....	U. of Chi. 1 sum.
	Mrs. Ardella Billings.....	7	.....	.....	U. of Chi. 2 sum.
	Elder, White .....	6	.....	.....	.....
	Helen Walker .....	6	Oberlin Col. 6 U. of Chicago 2	.....	U. of Jena. 1 sum.
	Eliza A. Rogers .....	6	.....	.....	.....
	Margaret McCowan.....	6	U. of C. 1 Ia. C. 4	.....	U. of Chicago ½
	Jean Newcomer .....	6	Rockford Col. 5	.....	U. of Chicago 1
	Laura A. Meier .....	6	Ripon 5	.....	.....
	Mabel Lea .....	5	.....	.....	U. of Wis. 1 ½
	C. W. Holbrook .....	6	Ripon 4	.....	.....
	F. W. Elson .....	6	.....	.....	Muskegon, Mich. Man. Tr. Sch. 1.
	Leigh M. Michelsen .....	.....	.....	.....	U. of Chi. sum
Colfax.	Milo Hunt.....	.....	Penn College 4, In Absentia 3 U. of Chi. 2 summers.	.....	.....
	Mae Brewer.....	.....	Monmouth 1	I. S. N. S. 2	U. of Neb. 1 sum.
	Josephine Lucas .....	.....	S. U. of Nebr. 4	.....	.....

**-FOUR YEAR COURSES.**

Preparations.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
B. A., B. P.	10	Algebra	72	5	40	English	144	5	40				
B. D., M. D.	20	Geometry	54	5	40	Physiology	18	5	40	Book-keeping	18	5	45
	20	Arithmetic	18	5	40	Political Econ	18	5	40	Word Analysis			
	4	Gen. History	36	4	40					Orthography	18	5	45
B. A.	1	U. S. History	18	4	40	Latin	144	4	45	Zoology	18	5	45
	1	Civics of U. S.	18	5	40	Botany	18	5	45	Geology	18	5	45
	1	Physical Geog	18	5	40	Eng. History	18	5	45	Psychology	18	5	45
	1	Physics	36	5	40	German	72	4	45				
A. B.	15	Algebra	54	5	45	Physics	36	5	40	Latin	108	5	40
	15	Geometry	54	5	45	English	144	4	40				
A. B.	15	Arithmetic	18	5	40	Political Econ	18	5	40	German	72	4	35
A. B.	2	Gen. History	36	5	40	Botany	18	5	40	Geology	18	5	35
	2	U. S. History	18	5	40	Book-keeping	36	5	70	Physiology	18	5	40
	2	Civics	18	5	40	Latin	36	5	40				
	2	Physical Geog	18	5	35								
B. L.	10	Algebra	54	5	30	Physical Geog	18	5	30	Botany	72	5	40
	10	Geometry	36	5	30	Physics	36	5	40	Zoology	18	5	40
A. B.	1	Gen. History	36	5	30	English	126	5	30	Latin	108	5	30
	1	U. S. History	12	5	30	Physiology	18	5	30				
		Algebra	54	5	40	Civics of U. S.	18	5	35	Political Econ	18	5	35
		Geometry	54	5	40	Physical Geog	18	5	40	Botany	18	5	40
A. B.	8	Arithmetic	36	5	35	Physics	36	5	40	German	36	5	40
B. D.	1	Gen. History	36	5	40	English	108	5	40	English History	18	5	40
B. D.	1	U. S. History	18	5	35	Physiology	45	5	40	Latin	72	5	40
		Algebra	54	5	40	Physics	36	5	40	Book-keeping	18	5	40
A. B.	10	Geometry	36	5	40	English	108	5	40	Com. Geography	18	5	40
A. B.	8	Arithmetic	18	5	40	Physiology	18	5	40	Geom. solid	36	5	40
Ph. B.	8 1/2	Gen. History	36	5	40	Political Econ	48	5	40	Botany	18	5	40
	8 1/2	U. S. History	18	5	40					Book-keeping	18	5	40
	8 1/2	Civics	36	5	40	Latin	108	5	40	Com. Geography	18	5	40
	8 1/2	Physical Geog	18	4	40								
		Algebra	57	5	40	English	66	5	40	Botany	19	5	40
Ph. B., A. M.	9	Geometry	38	5	40	Physiology	18						

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Columbus Junction	M. O. Crouch.....	4	Cornell Col. 4....		U. of Chi. 1. ....
	W. R. Lytle.....	6	Monmouth Col. 2		
	Pauling Collins.....	6	Monmouth Col. 4		
	Maud Easign.....	2	Joe College 4....		
Conrad....	A. M. Gray.....	7		I. S. N. S. 3.....	
	G. A. Sims.....	7		I. S. N. S. 1.....	
Coon Rapids.	Charles F. Schell.....	6	Western Col. 4		Doane Col. (Ore. Nebr.) 1.....
			U. of Chicago 2.....		
	Minnie H. Deyoe.....	7	Bethlehem Col. 3		
	Elena Jeffrey.....	7	Simpson Col. 4....		
Corning..	J. W. Fowler.....	1	Hamilton College N. Y. 4.....		Post grad. work at Cornell Univ. and Univ. of Chi..
	Edna B. Thompson.....	6	Northwestern U. Albion Col. (Mi) 2		S. U. I. 1/2.....
	Marion H. Dampman.....	6			Wash. Sem. 4
	Eva Smith.....	2	Monmouth Col. 5.		Har. Su. S. 6 w.
	Myra Reeves.....	6	Cornell College 4.		Univ. of Chicago Summer term..
	W. S. Hicks.....	6	Drake 1.....	I. S. N. S. 3.....	
Corringtonville..	O. B. Mericle.....	4	Western Col. 4....	I. S. N. S. 6 wks.	
	Jeanette Fletcher.....	7	Bellevue, Neb. 3		Fremont, Neb., Nor. 5 mo.....
	Ida Fay Hoax.....	7	Morning Side U. 2		
	Roxie Belle McCord.....	7	Cornell College 4.		Hedding Col. 3....
Corrywith..	J. R. Bagge.....	7	Des Moines Col. 4	I. S. N. S. 1 term.	Sac City Inst. 1..
	Helene Townsend.....	7	Iowa College 2....		
Corydon....	W. L. Pugh.....	6	Parsons Col. 4....		
	H. R. Smith.....	6	Cornell Col. 4....		
	W. B. Hays.....	6	Upper Iowa 3 mo.		
	Annie G. Marsh.....	3	Drake 5 mo.....	I. S. N. S.	

## -FOUR YEAR COURSES.

Preparations.	Yrs experience in H.S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. per a.	Branches studied.	Number weeks.	Rec. per week.	Rec. per a.	Branches studied.	Number weeks.	Rec. per week.	Rec. per a.
A. B.	4	Algebra	72	5	40	English	90	5	40				
A. B.	2	Geometry	36	5	40	Physiology	18	5	40	Arithmetic	18	5	40
A. B.	1	Gen. History	54	5	40	Political Econ.	18	5	40	Business Meth.	18	5	40
Ph. B.	0	U. S. History	36	5	40	Com. Law	18	5	40	Eng. History	18	5	40
		Civics	18	5	40	Expression	18	5	40	Commerce	18	5	40
		Physical Geog.	18	5	40					Eng. Grammar	18	5	40
		Physics	36	5	40	Latin	08	5	40				
B. D.		Algebra	36	5	35	Civics	36	5	35	Political Econ.	18	5	35
	9	Geometry	54	5	35	Physical Geog.	18	5	35	Botany	18	5	35
	4	Arithmetic	36	5	35	Physics	36	5	35	Economics	18	5	35
		Gen. History	54	5	35	English	108	5	35	Book-keeping	18	5	35
		U. S. History	18	5	35	Physiology	18	5	35	Latin	72	5	35
A. M.		Algebra	54	5	35	Physics	36	5	35				
		Geometry	54	5	35	English	144	5	35	Latin	72	5	35
	5	Arithmetic	36	5	35	Physiology	16	5	35				
Ph. B.	2	Gen. History	36	5	35	Political Econ.	16	5	35	Zoology	16	5	35
	1	U. S. History	36	5	35	Book-keeping	20	5	35	Botany	20	5	35
		Civics	22	5	35	Com. Law	16	5	35				
		Physical Geog.	18	5	35	Latin	36	5	35				
		Algebra	54	5	40	Physics	36	5	40	German	72	5	40
		Geometry	54	5	40	English	144	5	40	Book-keeping	18	5	40
		Arithmetic	18	5	40	Physiology	18	5	40	Com. Geog.	18	5	40
A. M.	11	Gen. History	36	5	40	Botany	18	5	40	Political Econ.	18	5	40
		U. S. History	18	5	40					English Hist.	18	5	40
A. B.	1	Civics	18	5	40	Latin	144	5	40				
		Physical Geog.	18	5	40								
	11												
A. B.	10												
A. B.	2												
B. D.													
A. B.	5	Algebra	72	5	35	U. S. History	18	5	35	English	82	5	35
		Geometry	72	5	35	Civics	36	5	35	Physiology	18	5	35
		Arithmetic	18	5	35	Physical Geog.	36	5	35	Book-keeping	36	3	70
A. B.		Gen. History	36	5	35	Physics	36	5	35	German	36	5	35
	2												
		Algebra	54	5	35	Civics	12	5	30	Political Econ.	12	5	35
		Geometry	54	5	35	Physical Geog.	24	5	35	Botany	12	5	35
		Arithmetic	36	5	30	Physics	36	5	30	Book-keeping	18	5	35
		Gen. History	36	5	35	English	12	5	30	Latin	72	5	35
		U. S. History	36	5	35	Physiology	12	5	25				
A. M.	6	Algebra	54	5	40	Physics	36	5	40				
A. B.	3	Geometry	54	5	40	English	44	5	40	Book-keeping	36	5	40
		Arithmetic	18	5	40	Physiology	18	5	40	German	72	5	40
	2	Gen. History	36	5	40	Spelling	44	5	15	Chemistry	36	5	40
B. D.	3	U. S. History	36	5	35	Music	44	2	25	Botany	18	5	40
		Civics	18	5	35								
		Physical Geog.	18	5	40	Latin	44	5	40				

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Council Bluffs ..	S. L. Thomas .....	1	S. U. I. $\frac{3}{4}$ . Uni. Chicago (Sum) 2	L. S. N. S. 4	
	Emma N. Beeche .....	5	U. Chicago (Sum) 4		
	H. E. Colby .....	4	Des Moines Col. 4		
	Frances D. Dalley .....	5	Smith Col. 4		
	J. O. Grason .....	6	H. P. Col. $\frac{3}{4}$		
	D. Fred Grass .....	6	Iowa College 4		
	A. R. Heaps .....	4	Harvard 2		
	Bianche Noel .....	6	N. W. Uni. 4		
	Mittie M. Pile .....	6	Iowa College $\frac{3}{4}$		
	Kate S. Reed .....	4	S. U. I. 2		Is. Business Col.
	Jennie G. Rice .....	4	S. U. I. 4, Chicago Uni. $\frac{1}{4}$		
	Anna Z. Ross .....	6	S. U. I. 4, Chicago Uni. 1-6		
	Maye Sedgwick .....	5	Drake Uni. 4		
	Edna M. Sprague .....	6	S. U. I. 2, Uni. Wisconsin 2		
	Charlotte A. Taylor .....	6	Denver Uni. 2		Wallace & Woodworth Bus. C. 1
	Marcia Waples .....	6	N. W. Uni. 2, Chicago Uni. 2, Uni. Berlin 1		
	Katella Wood .....	6	Uni. Chicago $\frac{1}{4}$ , Cornell 4		
Creaco ....	L. E. A. Ling .....	4	Uni. Wis. Sum. 2		
	M. Alda Tate .....	4			Wash. Acad. 4
	Etta Grice .....	7	Parson's Col. 8		
	Rhedella Kirtland .....	7	Drake 1; College Uni. Sum. 1		
Creston ..	O. E. French .....	7	Uni. Minn. 4		
	William Bell .....	4			Wash. Acad. 2
	Nancy Bell .....	7	Parsons Col. 2		
	Elizabeth Faye Rowls .....	7	U. of Neb. 8; U. of Chicago 2		
	B. D. Stowell .....	7	Albion Col. 2		Petokey Nor. and Bus. Col. 1; Mich. S. Nor. Col. 1
	Sarah J. Sawyer .....	6	U. of Wis. 1		Revaton Acad., Vt. 7; Richland Inst. 2
	Jennie MacEachram .....	5			Oberlin Acad. $\frac{1}{2}$
	Edith Leslie Hatch .....	7	Oberlin Col. 4		Valparaise Col. $\frac{3}{4}$
Dallas Center ..	James R. Loek .....	6	U. of Chicago 1 $\frac{1}{2}$		
	W. H. Gemmill .....	5	Iowa State Col. 4		Drake 1
	Anna V. Kegler .....	7		L. S. N. S. 2	Mt. St. Joseph 1
	Bertha Wise .....	7	Iowa College 4		

## -FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Y's experience in H.S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
M. D.	12	Algebra.....	80	5 50	Orthography....	18	5 50	Orthography....	18	5 50	Orthography....	18	5 50
Ph. B.	6	U. S. His. Civics	33	5 50	Etymology.....	18	5 50	Etymology.....	18	5 50	Etymology....	18	5 50
B. L.	4	Physical Geog.	18	5 50	Algebra.....	18	5 50	Arithmetic....	18	5 50	Arithmetic....	18	5 50
	4	English Lit....	108	5 50	Geometry.....	36	5 50	Business Law..	18	5 50	Business Law..	18	5 50
	4	Physiology....	18	5 50	Gr. and Rom. H.	36	5 50	Business Forms	18	5 50	Business Forms	18	5 50
	4	Latin.....	144	5 50	Biology.....	36	5 50	Book-keeping..	36	5 50	Book-keeping..	36	5 50
A. B., Ph. B.	4	ser. or Hist.	72	5 50	Chemistry.....	36	5 50	Com. Geog....	18	5 50	Com. Geog....	18	5 50
B. S.	4	Algebra.....	18	5 50	Physics.....	36	5 50	Political Econ..	18	5 50	Political Econ..	18	5 50
A. B.	4	Geometry.....	36	5 50	Book-keeping..	18	5 50	Short Hand....	108	5 50	Short Hand....	108	5 50
A. S.	4	English Lit....	26	5 50	Business Law...	18	5 50	Type-writing...	172	5 50	Type-writing...	172	5 50
	4	Electives.....	72	5 50	English Lit....	36	5 50						
Ph. B.	4												
B. S.	10												
Ph. B.	2												
Ph. B.	5												
	6												
Ph. B.	3												
B. A.	7												
	17	Algebra.....	54	5 40	Civics.....	18	5 40	Political Econ..	18	5 40	Political Econ..	18	5 40
	6	Geometry.....	54	5 40	Physical Geog..	18	5 40	Botany.....	18	5 40	Botany.....	18	5 40
	5	Arithmetic....	6	5 35	Physics.....	36	5 40	Geology.....	12	5 40	Geology.....	12	5 40
	5	General Hist..	54	5 35	English.....	90	5 40	Chemistry.....	24	5 40	Chemistry.....	24	5 40
B. S.	4	U. S. History..	18	5 35	Physiology.....	12	5 40						
	17	Algebra.....	74	5 43	Latin.....	144	5 43	Zoology.....	18	5 43	Zoology.....	18	5 43
B. A.	20	Geometry.....	54	5 43	Physics.....	36	5 43	Botany.....	18	5 43	Botany.....	18	5 43
	17	Arithmetic....	18	5 43	Physical Geog..	36	5 43	German.....	72	5 43	German.....	72	5 43
Ph. B.	1	General Hist..	54	5 43	Physiology.....	18	5 43	Elective.....	72	5 43	Elective.....	72	5 43
	1	U. S. History..	36	5 43	Physics.....	36	5 43	Commercial...	288	5 43	Commercial...	288	5 43
		English.....	144	5 43	Geology.....	18	5 43						
		English History	18	5 43	Political Econ..	18	5 43						
	14												
B. A.	2												
B. S.	6												
	6	Algebra.....	54	5 40	English.....	144	5 40	Word Anal....	18	5 40	Word Anal....	18	5 40
B. S.	1	Geometry.....	54	5 40	Physiology.....	18	5 40	Botany.....	18	5 40	Botany.....	18	5 40
B. D.	0	Arithmetic....	36	5 40	Political Econ..	18	5 40	Book-keeping..	18	5 40	Book-keeping..	18	5 40
AB		General Hist..	26	5 40	Word Analysis..	80	1 40	Zoology.....	18	5 40	Zoology.....	18	5 40
		U. S. History..	18	5 40	Latin.....	144	5 40	English History	18	5 40	English History	18	5 40
		Civics.....	18	5 40	Orthography....	18	5 40	Reviews.....	26	5 40	Reviews.....	26	5 40
		Physical Geog.	18	5 40									
		Physics.....	36	5 40									

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Davenport	J. B. Young, Supt.				
	W. D. Wells	2	S. U. I. 4	I. S. N. S. 2½	
	Chas. M. Lillie	5	Cornell Uni. N.Y. 4	M. Y. St. Nor. Col. 1	
	Paul Radenhansen	7	Uni. of Bern 5		
	Chas. A. Kellogg	6	Yale Uni. 5		
	Christian Meyer Jr.	6	Yale Uni. 4		Genesee Nor. N.Y. 1
	O. H. Lowary	6	Cornell Uni. N.Y. 4		
	J. L. Thatcher	6	Uni. of Wis. 4		Post Grade Work in U. of Wis. 2
	A. F. Ewers	6	S. U. I. 4	I. S. N. S. 4	
	J. B. Baldwin	6			Hopedale N. Col. 4
	Theo. W. Schiek	7	Elmhurst Col. 5		
	Jennie Cleaves	6	Wash. Col. 4		Ia. C. & U. of Chi. 3
	Lulu L. McCafferty	6	Uni. of Ohio. 4		
	Minnie Johnson	6	Knox Col. 4		Uni. of Chi. 1
	Annette Stayt	6	Uni. of Mich. 4		
	Grace Mitchell	6	Uni. of Minn. 4		
	Alice Middlekauff	6	Oberlin Col. 4		
	Marie Lorenzen	6	Ladies Seminary, Hamburg, Germany, Lectures at Hanover and Oberlin.		
	Ella Behnke	7	Uni. of Chi. 4		
Decorah	J. M. Mahaffy	6	S. U. I. 4		
	H. C. Johnson	2	S. U. I. 4		
	Mary Mueller	6	S. U. I. 4		
	Lulu Moulton	6	S. U. I. 4		
	F. E. Weistead	5	Cornell Col. 4		
Delta	Clyde Workman	8	Uni. of Chi. 1		
	Mac Mead	8		I. S. N. S. ½	So. Ia. M. & Sci. Ia. 2
Denison	Ernest W. Fellows	3	Iowa Col.		
	O. E. Humphreys	5	Fairfield Co. (Neb.) 2	Neb. St. Nor. 2	
	Myrtle Baker	5	S. U. I. 2½		Ia. City Com. Col.
	Myrtle Culmer	6	Simpson Col. 3		Ohio Wesleyan 1
	Bess Peebles	6	Upper I. Uni. 4		S. U. I. 1
	Marcella Nachtmann	4	Chi. Conser. 1		Nat'l Sum. School of Music 3
	Jacob Johnson	4		I. S. N. S. 4½	
Des Moines East	May Goodrell		S. U. I. 3		
	Elizabeth F. Wright		Cornell Col. 4		
	Mary E. Patterson		Iowa Col. 4, Chi. U. 3		
	Maud St. John		S. U. I. 3		
	Caroline S. Lawrence		Iowa Col. 4		
	Sarah Wickware		Iowa Col. 1, U. of Leipzig 1½		
	Francis Church		S. U. I. 3	Neb. Nor. 3	
	W. P. Blair		Iowa Col. 4		
	Caroline A. Bee		Mt. Holyoke Col. 4		
	Elizabeth Richardson		Des Moines Col. 3	Mass. Nor. 2	
	Edna L. Hooley		U. of Wis. 4		
	Edith C. Keefer		Rhode Is. Col. 4		M. L. B. Woods' Hall (Summer).
	F. D. Nelson		Des Moines Col. 4		
	Hilton I. Jones		U. of Chi. ½	Mankato Nor. 1, Parker Normal (Minn.) 4	
	George R. Coffman		Drake U. 4, U. of Chi. ½		
	Caroline Uhl		Iowa Col. 4		
	Edna S. Foerbaugh			I. S. N. S. 2	
	Christine Balliet		Drake U. 3		



## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Des Moines West .....	W. O. Riddell, Supt.....				
	W. A. Crusinberry.....		S. U. I. and U. of Chi. (Special), Oskaloosa Col. 2		Goodsell Observ. 4 summers, Lenox Acad. and Col. 7
	Martha A. Beeson.....	5	Butler U. I., U. of Wis. (Summer)		U. of Chi. (Correspondence), Tr. school (Marshalltown, Ia.) 1
	Jora Brotherton.....	5	U. of Chi. 1. Knox Col. 4		U. of Minn. 1 sum, Cornell U.
	Anna L. Burdick.....	5	S. U. I. 4		
	M. Leon Duflos.....	4	Col. de Lemm 10, Lycees' Charlemagne (Paris) 8		
	Clara Foss.....	6			Grinnell Acad. 1.
	Dorothy Fowler.....	5	U. of Mich. 3		Drake 1
	Adele Fuchs.....	5	U. of Chi. 2 sem., S. U. I. 2 years		Berlin U. 1, Col. of Med. 2
	Lizbeth V. Griffith.....	4	Chi. Froebel Ass. 1		Humboldt Col. ½
	Lafayette Higgins.....	5	Drake 4		Cumming School of Art 2
	Francis Keffe.....	5	Pratt Ins. 2		W. D. M. Train. School
	Margaret King.....	5	Drake U. 4, U. of Chi. 2		U. of Chi. 1 gr., S. Sea. Amherst
	Zulema Kostomlatsky.....	4	S. U. I. 4		Studied in Ger.
	Cordelia Kyle.....	5	Iowa Col. 1		U. of Minn. 1
	Sarah M. Loving.....	4	S. U. I. 3½, U. of Chi.		U. of Chi. 1
	Frances Mae Farland.....	4	Woman's College (Balt.) 1, D. M. Col. 2		Columbia, B. V. Sloyd Sch. 1-4
	Albert W. Merrill.....	5	Iowa Col. 4		U. of Chi. 1
	Alice E. Moes.....	4	Drake (Summer)	I. S. N. S. I.	C. C. O. Col.
	A. C. Newell.....	4	U. of Mich. 4		U. of Chi. 1
	Letta Simmons.....	5	Carthage Col. 4		U. of Chi. 1
	Clay D. Slinker.....	6			U. of Chi. 1
	Herbert B. Smith.....	5	U. of Minn. 4		U. of Chi. 1
	Minnie Snure.....	5		St. Nor. College Mich. 4½	U. of Chi. 1
	Mary Stanley.....	5	Cornell Col. 8		U. of Chi. 1
	Jessie Taft.....	5	Drake 2		U. of Chi. 1
	Josephine Taylor.....	5	Drake 2		U. of Chi. 1
	Eldon Uery.....	6	Iowa State Col. 4½		U. of Chi. 1
	N. H. Weeks.....	5	Amherst Col. 4		U. of Chi. 1
	Otto Wendelburg.....	5	Ger. Am. Teach. Sem. (Mil.) 2		U. of Chi. 1
	Mrs. Otto Wendelburg.....	5	Ger. Am. Teach. Sem. (Mil.) 2		U. of Chi. 1
	Katherine Willis.....	5	Des Moines Col. 4		U. of Chi. 1
	Josephine V. Williams.....	5	S. U. I. 4		U. of Chi. 1

**—FOUR YEAR COURSES.**

[illegible]

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number rec. periods	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Des Moines North.	J. G. Grundy, Prin.	.....	.....	.....	Stout Man Tr. S. 3
	Paul A. D. Strickson	.....	.....	.....	Bradley Inst. 5 w
	Grace Troutner	6 I. S. O	.....	1. S. N. S. 4	Des Moines Col. 3/4
	Grace Fager	5 U. of Wis.	.....	.....	.....
	Ella Mehlin	5 Drake 3 1/2	.....	.....	.....
	Anna G. Herrick	5 Iowa Col. 4	.....	.....	.....
	J. L. Martin	5 Cornell U. 4	.....	.....	.....
	Ruth W. Grefe	5 Iowa Col. 2	.....	.....	.....
	T. E. Goodell	5 Vas-ar Col. 4	.....	.....	.....
		5 U. of Chi. 2, U. of S. D., Johns Hopkins 2	.....	.....	U. of Rochester, Chi. Med. Col.
	Mabel E. Frisbie	5 Iowa Col. 4	.....	.....	.....
	Emma C. Moulton	5 Iowa Col.	.....	.....	.....
	B. E. Farrand	4 Drake 4	.....	.....	.....
			.....	.....	.....
Dexter	D. P. Repass	7	.....	.....	N. Ind. Nor. 2
	Bessie Burnett	7 Simpson Col. 2	.....	1. S. N. S. 2	.....
	Jessie Hinkle	6 S. U. I. 4	.....	.....	.....
	Francis H. Arnold	7 Iowa Western U. Conservatory 2	.....	Wis. Nor. 1/2	Chi. Sch. of Music Methods
Dow City	Harry D. Kies	8 Drake 4	.....	.....	.....
	Myrtle Newman	8 Cornell Col. 1 1/2	.....	1. S. N. S. sum s.	U. of Neb. 1
Dewa	C. H. Gilbert	5	.....	1. S. N. S. 4	Elsworth Col. 2
	Daisy P. Blum	7 S. U. I. 4	.....	.....	.....
	Eva L. Cole	7	.....	1. S. N. S. 2	.....
Dubuque	Frank L. Smart, Prin	.....	Howard U. 3	.....	Nor. Ind. 4, U. of Chi. 3 terms
	John A. Anderson	6	Lake Forest U. 2	.....	U. of Chi. 1 term, U. of Mil. 1 term, Harvard U. 1 1/2
	Helen M. I. Sauer	6	Private instruction after graduating from Dubuque H. S. 2 y's	.....	.....
	Susan W. Hetherington	6	Young Ladies' Sem. of Dubuque 4 years, Grad. of O. L. S. C. 4	.....	.....
	Harriet E. Greenhow	6	Private instruction after graduating from Dubuque H. S. 1 yr.	.....	.....
			.....	.....	.....

— FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
		Algebra	54	5	45					Solid Geometry	18	5	45
		Geometry	36	5	45	Latin	144	5	45	Algebra—Adv.	18	5	45
		General Hist.	36	5	45	Latin Prose	144	1	45	Physics	36	5	45
		U. S. History	36	5	45					Shop Work	108	5	45
M. Di	9	Civics	18	5	45	Chem. or Zoology	36	7	45	Mechan. Draw	108	5	45
Ph. B	5	Physical Geog.	18	5	45	Physics	36	7	45				
Ph. B	3	English	144	5	45	Geometry—Solid	18	5	45	Latin or Ger.	72	5	45
A. B.	2	Physiology	18	5	45	German or Latin	72	5	45	French or Ger.	72	5	45
A. B.	1	Botany	18	5	45					Com. Course	252	5	45
A. B.	12	Algebra	36	5	40	English	144	5	40	Political Econ.	18	5	40
Ph. B	7	Geometry	36	5	40	Physiology	18	5	40	Arithmetic	18	5	40
A. B.	11	Arithmetic	18	5	40					Political Geog.	18	4	40
B. Pe.	4	General Hist.	36	5	40	Latin	144	5	40	Grammar	18	5	40
		U. S. History	18	5	40	Algebra	18	5	40	Dialectics	18	5	40
		Civics	18	5	40	Geometry	18	5	40	Book-keeping	36	5	40
		Physics	36	5	40	Physical Geog.	18	5	40				
		Algebra	54	5	30	Physical Geog.	20	5	30	Book-keeping	20	5	30
		Geometry	36	5	30	Physics	36	5	30	Eng. History	36	5	30
		Arithmetic	36	5	30	English	120	5	30	Music	144	2	15
P. H. P., B. P. E	5	General Hist.	36	5	30	Physiology	16	5	30	Latin	72	5	39
		U. S. History	20	5	30	Political Econ.	16	5	30				
		Civics	20	5	30	Botany	20	5	30				
		Algebra	54	5	45	U. S. History	18	5	40	Botany	18	5	45
M. Di	8	Geometry	54	5	45	Physical Geog.	18	5	35	Word Study	72	1	35
A. B.	1	Arithmetic	18	5	45	Physics	36	5	45	Eng. Classics	90	2	49
B. Di	2	General Hist.	36	5	40	English	108	5	25	Latin	144	5	40
A. B.	10	Algebra	60	5	40	Latin	80	5	40	English course without foreign language	280	5	40
		Geometry	40	5	40	German	80	5	40				
		Eng. History	20	5	40	Hist. Ancient	40	5	40	Electives for all courses			
		U. S. History	20	5	40	Botany, Zoology or Phys. Geog.	40	5	40	Hist. Med. and Modern	40	5	40
A. B., A. M.	8	Civics	30	5	40	Chemistry	20	5	40	Alg. Adv.	20	5	40
		Physics	40	5	40					Chem. Adv.	20	5	40
		English	160	5	40					Physiology	20	5	40
										Trigonometry	20	5	40
		Latin	160	5	40	German	100	5	40	Geom.—Solid	20	5	40
		Greek	160	5	40	French	60	3	40	Draw. Mechan.	80	5	40
		Hist. Ancient	40	5	40	Botany, Zoology or Phys. Geog.	40	5	40	Woodwork	80	5	40
						Hist. Ancient	40	5	40				
		Latin	160	5	40	Com. Course	140	5	40				
		Botany, Zoology or Phys. Geog.	40	5	40								
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## HIGH SCHOOL STATISTICS

High school.	Name of instructor.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Dubuque.	Matilda A. Harrington .....	6	U. of Mich. 3½	I. S. N. S. 2.....	U. of Cal. (P.G.) 1
	J. C. Nelson .....	6	Hanover Col. 4.....		U. of Mich. 1 term
					U. of Ind. 1 term
					U. of Wis. 1 term
	J. P. Mueller .....	6	U. of Namur (Belgium) 1 .....	Royal N. Luxemburg 8, Cook Co. Nor. 1.....	Harv. U. 1 term
	Gayle Hamilton .....	8	U. of Berlin 1.....		The Sorbonne Paris ½, Private institution Paris ½
	Grace G. Murray .....	6	U. of Chi. 4.....		U. of Wis., Manual training Co 4 terms
	W. W. Claus .....	7			U. of Chi. 1 term
	N. D. Hamilton .....	6	U. of Indiana 4.....	Ind. State Nor. 1.	Emerson Col. Oration (Boston) 1 term
	W. B. Catlin .....	6	U. of Nebr. 3.....	Neb. State Nor. 3	
	Fred S. Barrows .....	6	U. of Wis. 2.....	State Nor. (Point Stevens) 2.....	
	Anna F. Jess .....	6			St. Joseph Col. 4.
	Linda Rider .....	6	U. of Wis. 4.....		
Dunlap.	J. Fletcher Lewis .....	6	U. of Mich. 4.....		
	L. G. Cooper .....	6	U. of Mich. 4.....		
	Geo. Galloway .....	4	S. U. I. 1.....	I. S. N. S.	
	Roxy Peterson .....	7		I. S. N. S.	
Dysart.	Mayme Taylor .....	7	Iowa Col. 4.....		
	L. J. McGinty .....	5	Cornell U. 2, Central U. 2.....		Fredonia Normal (N. Y.) 2.....
	E. Nelle Bait .....	7	Monmouth Col. 1.		
Eagle Grove.	Alice J. White .....	6		I. S. N. S. 8.....	
	L. G. Focht .....	2	Tabor College 2,		
			Drake 4.....		
	Adelaide Boden .....	7	Drake Nor. S. 2,		
			Drake U. 2.....		
	Bernice Johnston .....	7		I. S. N. S. 1 term	S. U. I. 1 term....
	Eugenia Pattison .....	7		I. S. N. S. 2.....	
	Jessie L. Hopkirk .....	7		I. S. N. S. 2.....	

**—FOUR YEAR COURSES.**

Preparation.		High School Courses.								
Degrees held,	Yr's experience in H.S.	Branches studied.	Number weeks. Rec. per week.	Rec. period.	Branches studied.	Number weeks. Rec. per week.	Rec. period.	Branches studied.	Number weeks. Rec. per week.	Rec. period.
A. B., M. D. ....	6									
A. B. A. M. ....	15									
.....	8									
Ph. B. ....	20									
A. B. ....	4									
.....	2									
.....	3									
A. B. ....	1									
A. B. ....	1									
A. B. ....	1									
B. D., M. D. ....	10	Algebra .....	54	5 40	Physical Geog. ...	18	5 40			
B. D. ....	6	Geometry .....	36	5 40	Physics .....	36	5 40	German .....	72	5 40
B. A. ....	...	Arithmetic .....	36	5 35	English .....	126	5 40	Word Analysis ..	18	5 40
		Gen. History .....	36	5 40	Physiology .....	18	5 40	Book-keeping ..	18	5 35
		U. S. History .....	18	5 40				Latin .....	36	5 40
		Civics of U. S. ...	18	5 40	Latin .....	144	5 40			
A. B., L. L. B. ....	6	Algebra .....	54	5 40	English .....	144	5 40	Civics—Iowa .....	18	5 40
.....	9	Geometry .....	36	5 40	Physiology .....	18	5 40	Book-keeping ..	18	5 40
.....		Arithmetic .....	18	5 40	Botany .....	18	5 40	Political Econ. ...	18	5 07
.....		Gen. History .....	36	5 40	Latin .....	36	5 40	Eng. History ..	18	5 07
.....		U. S. History .....	18	5 40				Didactics .....	18	5 07
		Civics of U. S. ...	18	5 40	Latin .....	108	5 40	Arithmetic .....	18	5 40
		Physical Geog. ...	18	5 40	Geometry—Solid ..	18	5 40	Reviews .....	18	5 40
		Physics .....	36	5 40						
B. S. ....		Algebra .....	54	5 40	Physics .....	36	5 40	Latin .....	144	5 40
		Geometry .....	54	5 40	English .....	144	5 40	Zoology .....	18	5 40
		Arithmetic .....	18	5 40	Physiology .....	18	5 40	German .....	72	5 40
B. Sc., Ph. B. ....		Gen. History .....	54	5 40	Political Econ. ...	18	5 40	Book-keeping ..	18	5 40
		U. S. History .....	18	5 35	Botany .....	18	5 40			
B. D. ....		Civics .....	18	5 40						

## HIGH SCHOOL STATISTICS

High School	Name of instructors.	Number of period.	Preparation.		
			Years in College or university.	Years in a State Normal.	Years in other institutions above high school grade.
Earlham ..	William H. Monroe .....	6	Parsons Col. ....		Bloomfield Ner. and Scientific Institution 4.....
	E. L. Ferrier .....	8			Valparaiso Col. 3, U. of Chi. 1/2, Chi. Normal 1/2, Highland Park 1/2, Muscatine Bus. Col. 1/2.....
	R. V. Hopkins .....	8	Lombard College Galesburg, (Ill.) 4.....		
Early .....	F. L. Kolb .....	6		I. S. N. S. 4 .....	
	Altha Stone.....	8		I. S. N. S. 3.....	
Eddyville.	J. A. Yeager .....	8		I. S. N. S. 3 1/2....	
	Mary A. Moore .....	8	Penn Col. 4 .....		
Edgewood.	Thos. R. Roberts .....	7	Upper Iowa University 4 .....		
	M. J. P. Thing .....	8	Carleton Col. 4 .....		Chi. Theo. Sem 3
Eldon .....	A. S. Fulton .....	4	Mich. Univ. 3.....		Wash. Acad. 4.....
	Miss Chidester .....	6	Parsons Col. 4 .....		
	Miss Whipple.....	6	Iowa State Col. 4 .....		
Eldora.....	A. J. Cavana .....	6	S. U. I. ....		Harv. & U. of C. Summer schools..
	Luella M. Albrook .....		Cornell Col. ....		
	Jennie Fenton .....		S. U. I. ....		
	Kate Donaldson .....				
	Miss Seever (Music) .....				
Elma.....	A. B. McCook .....	6	Univ. of Minn 1 .....		
	Mrs. A. R. McCook ..	7			

## —FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
A. M.	20	Algebra .....	60	5	35	Physics .....	53	5	35	Eng. Classics ..	12	5	35
		Geometry .....	4	5	35	English .....	144	5	35				
		Arithmetic .....	24	5	35	Physiology .....	12	5	35	Latin .....	106	5	35
		Gen. History .....	35	5	35	Political Econ. ....	24	5	35				
		U. S. History .....	18	5	35	Agriculture .....	18	5	35	Book-keeping ..	1	5	35
		Civics .....	18	5	35	Com. Geog. ....	18	5	35	Astronomy .....	16	5	35
		Physical Geog. ....	18	5	35	Word Analysis ..	36	5	35	Botany .....	16	5	35
B. S.	7												
A. B.	1												
M. Di.	5	Algebra .....	54	5	45	Civics .....	18	5	30	Political Econ. ..	1	5	30
M. Di.	1	Geometry .....	54	5	45	Physical Geog. ..	18	5	30	Bookkeeping ..	1	5	45
		Arithmetic .....	36	5	30	Physics .....	36	5	45	Latin .....	7	5	45
		General Hist. ....	36	5	30	English .....	126	5	30				
		U. S. Hist. ....	18	5	30	Physiology .....	18	5	30				
B. Di.	2	Algebra .....	72	5	35	Civics .....	18	5	35	Botany .....	18	5	30
A. B.	2	Geometry .....	54	5	35	Physical Geog. ..	36	5	30	Bookkeeping ..	36	5	35
		Arithmetic .....	18	5	35	Physics .....	36	5	40	Latin .....	66	5	35
		General Hist. ....	36	5	35	English .....	90	5	30				
		U. S. Hist. ....	36	5	30	Political Econ. ..	18	5	30				
Ph. B.		Algebra .....	54	5	40	U. S. Hist. ....	18	5	40	English .....	144	5	40
A. B.		Geometry .....	36	5	40	Civics .....	18	5	40	Physiology .....	18	5	40
A. B. B. S. B. L.		Arithmetic .....	18	5	40	Physical Geog. ..	18	5	40	Botany .....	18	5	40
(B. D.)		General Hist. ....	36	5	40	Physics .....	36	5	40	Latin .....	106	5	40
A. B.	12	Algebra .....	72	5	40	Physics .....	36	5	40	Physiology .....	18	5	40
		Geometry .....	54	5	40	English .....	144	5	40	Zoology .....	18	5	40
		Arithmetic .....	18	5	40	Political Econ. ..	18	5	40	Book-keeping ..	18	5	40
		General Hist. ....	36	5	40					Mist. U. S. ....	18	5	40
		Civics .....	18	5	40	Latin .....	144	5	40	German .....	72	5	40
		Physical Geog. ....	18	5	40								
B. S.	12	Algebra .....	54	5	40	Physical Geog. ..	18	5	40	Botany .....	18	5	40
		Geometry .....	54	5	40	Physics .....	36	5	40	Orthography ..	18	5	40
		Arithmetic .....	18	5	40	English .....	144	5	40	Bookkeeping ..	18	5	40
		General Hist. ....	36	5	40					German .....	36	5	40
		U. S. Hist. ....	18	5	40	Latin .....	144	5	40	Latin .....	36	5	40
		Civics .....	18	5	40					Oldacities .....	18	5	40
A. B.	4	Algebra .....	54	5	40	Physics .....	36	5	40	Bookkeeping ..	18	5	40
		Geometry .....	36	5	45	English .....	144	5	40				
		Arithmetic .....	18	5	40	Political Econ. ....	18	5	40	Latin .....	72	5	40
		Gen'l History .....	36	5	40	Botany .....	18	5	40				
		U. S. History .....	18	5	40	Eng. History .....	18	5	40	German .....	72	5	40
		Civics .....	36	5	40	Com'l. Geog. ....	18	5	40				
		Physical Geog. ....	18	5	40	Com'l. Law .....	18	5	40				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Emerson..	J. D. Reed .....	7	State Univ. of Nebr. 1.....		Fremont, Neb. (Nor) 8.....
	Lois Willson .....	8		I. S. N. S. 2....	
Hammetsburg..	E. O. Meredith .....	3	Penn Col. 4.....		
	Anna Bernard .....	5	U. of Wis. S. U. I. 4.....	I. S. N. S. 3....	
	Mabel Davis .....	6	S. U. I. 4.....		
	Margaret Gorman .....	5		I. S. N. S. 4....	
	H. E. Miller .....	5	Beuna Vista Col. 2 Charles City Col. 2.....		
Estherville	J. L. Mishler, Supt. ....	1	Carthage Col. 4.....		Rock Riv. Sem. 2
	Faith Brown .....	6	Oberlin Col. ....		
	Edna Mingus .....	6	S. U. I. ....		
	Margaret Taylor .....	6	Ia. St. Col. 4.....		Cornell Col. 1....
	Jean McKellar .....	6	S. U. I. 2.....	I. S. N. S. 4....	
Exira.....	F. A. Nims .....	6	U. of Neb. 2.....		Fremont Normal School Neb. 1....
	Dena Statzell .....		Boston Col. 2.....		
Fairfield ..	J. A. Power .....	8	I. W. U. 4.....		So. Iowa Nov. 2..
	Martha E. Emry .....	6	S. U. I. 3.....	I. S. N. S. 2....	
	Nellie Jordan .....	5	Parsons Col. 4.....		
	Gertrude Atkins .....	5	Baldwin U. 4 Ohio .....		Ger. Wallace Col. 3
	Martha Hutchinson .....	6	S. U. I. 2.....		
	Harry W. Cooper .....	6	Parsons Col. 4.....		
	Oora Ball .....	1	Parsons Col. 4.....		New Eng. Con. 2
Farming- ton .....	A. T. S. Owen .....	5	Knox Col. 4.....	I. S. N. S. 1.....	
	Jessie Ford .....	8		I. S. N. S. 1.....	St. Mary's Acad 4
Fayette ..	J. E. Moore .....	5	Union College 3 U. of Nebraska 1 .....		Lincoln Nor. 1....
	Eleanor M. Garrison .....	5	Cornell College 2 Upper Ia. U. 1.....		Epworth Sem. ....
	Erma E. Cole .....	6	Upper Iowa U. 5.....		U. of Wis. Sta. Sem.
	Samuel Tift .....	1	Upper Iowa U. 3.....		Oelwein Bas. C. 1
Fonda .....	W. W. Bell .....	4		I. S. N. 5.....	
	Irving Davis .....	6	Iowa College .....		
	Grace Bradshaw .....	6	Cornell College .....		
Fontanelle	Frank Linderman .....	5	S. U. I. 3 Cornell Col. 1.....		German Proseminar Chicago 1..
	Minnie D. Harmsen .....	6	Drake 4.....		Drake Prep. Sch. 3
	Florence Fenner .....	6	Drake 4 1/2 .....		

## -FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
B. Di.	4	Algebra.....	56	5 35	Civics.....	20	5 35	Botany.....	16	5 35			
		Geometry.....	56	5 35	Physical Geog..	20	5 35	Book keeping...	16	5 35			
		Arithmetic.....	56	5 35	Physics.....	20	5 35	Latin.....	144	5 35			
		Gen'l History...	56	5 35	English.....	108	5 35						
		U. S. History...	16	5 35	Political Econ..	16	5 35						
M. A.	12 1/2	Algebra.....	54	5 40	Physics.....	36	5 40	German.....	72	5 40			
B. Di.	6	Geometry.....	54	5 40	Political Econ..	108	5 40	Eng. History...	18	5 40			
Ph. D., B. Di.	8	Arithmetic.....	18	5 40	Botany.....	18	5 40	Book keeping...	18	5 40			
M. Di.		Gen'l History...	70	5 40	English.....	18	5 40	Zoology.....	18	5 40			
		U. S. History...	18	5 40	Latin.....	144	5 40	Chemistry.....	18	5 40			
		Civics of U. S.	18	5 40				Physiology.....	18	5 40			
		Physical Geog.	18	5 40				Reviews.....	18	5 40			
A. B.													
B. S.	17	Algebra.....	54	5 40	Physics.....	36	5 40	Latin.....	144	5 40			
B. A.	2	Geometry.....	54	5 40	English.....	134	5 40						
B. A.	2	Arithmetic.....	18	5 40	Physiology.....	18	5 40	Com'l Geog....	18	5 40			
B. S. B. A.	3	Gen'l History...	36	5 40	Political Econ..	18	5 40	Com'l Law.....	18	5 40			
Ph. B. B. D. M. Di.	7	U. S. History...	18	5 40	Botany.....	18	5 40	Pedagogy.....	18	5 40			
		Civics.....	18	5 40	Zoology.....	18	5 40	Book keeping...	36	5 40			
		Physical Geo g.	18	5 40									
B. S.	8	Algebra.....	54	5 45	Civics.....	18	5 45	Political Econ..	18	5 45			
		Geometry.....	54	5 45	Physical Geog..	18	5 45	Latin.....	144	5 45			
		Arithmetic.....	18	5 45	Physics.....	36	5 45						
		General Hist...	36	5 45	English.....	144	5 45						
		U. S. History...	18	5 45	Physiology.....	18	5 45						
B. S. A. B. A. M.	13	Algebra.....	72	5 40	English.....	108	5 40	Physiology.....	18	5 40			
Ph. B. B. Di.	11	Geometry.....	64	5 40	Pol. Econ.....	16	5 40	Zoology.....	18	5 40			
B. S.	6	Arithmetic.....	8	5 40	Book-keeping...	16	5 40	Botany.....	20	5 40			
B. L.	3 1/2	General Hist...	56	5 40				English History	36	5 40			
B. Ph. M. Di.	1	U. S. History...	20	5 40	Latin.....	144	5 40	English Classics	20	5 40			
B. A.	8	Civics.....	12	5 40				Eng. Grammar	16	5 40			
B. S.	3	Physics.....	36	5 40	Physical Geog..	20	5 40						
B. S. M. Di.	13	Algebra.....	56	5 40	Civics.....	36	5 40	Political Econ..	18	5 40			
		Geometry.....	40	5 40	Physical Geog..	36	5 40	Botany.....	16	5 40			
		Arithmetic.....	32	5 40	Physics.....	32	5 40	Geology.....	16	5 40			
		General Hist...	32	5 40	English.....	112	5 40	Astronomy.....	18	5 40			
		U. S. Hist.....	32	5 40	Physiology.....	32	5 40	Latin.....	40	5 40			
B. E.	9	Algebra.....	54	5 40	Physical Geog..	18	5 40	Cicero.....	36	5 40			
		Geometry.....	54	5 40	Physics.....	36	5 40						
		Arithmetic.....	18	5 40	English.....	126	5 36						
		Gen. History...	36	5 40	Physiology.....	18	5 36	Book keeping...	18	5 35			
A. B.	1	U. S. History...	18	5 40	Political Econ..	18	5 36	Com. Law.....	18	5 35			
		Civics.....	18	5 40	Latin.....	72	5 40						
B. Di.	4	Algebra.....	36	5 40	Physical Geog..	36	5 40	Botany.....	20	5 40			
Ph. B.		Geometry.....	36	5 40	Physics.....	36	5 40	Physiology.....	18	5 40			
B. S.		Arithmetic.....	36	5 40	English.....	144	5 40	Word Analysis.	18	5 40			
		Gen. History...	36	5 40	Political Econ..	20	5 40						
		U. S. History...	18	5 40	Latin.....	144	5 40						
		Civics.....	36	5 40									
Ph. B., B. D.	8	Algebra.....	54	5 35	Physical Geog..	18	5 35	Latin.....	72	5 35			
		Geometry.....	54	5 35	Physics.....	36	5 35	German.....	72	5 35			
		Arithmetic.....	18	5 35	English.....	144	5 35						
		Gen. History...	36	5 35	Physiology.....	18	5 35						
		U. S. History...	18	5 35	Political Econ..	18	5 35						
		Civics.....	18	5 35	Book-keeping...	18	5 35						

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Forest City.....	Albert P. Heald.....	3	3. U. I. 4.....	.....	.....
	L. Caire Holson.....	3	3. U. I. 4.....	.....	.....
	Ralph E. Root.....	6	Morningside C. 4.....	.....	.....
Ft. Dodge.	Mary A. Crawford.....	5	Iowa.....	.....	Harvard.....
	H. W. Moody.....	6	Cornell Col.....	.....	.....
	Olara Lowrey.....	5	Univ. of Chicago.....	.....	.....
	Anna E. Keirulff.....	5	8. U. I.....	.....	.....
	Jessie L. Craig.....	5	Univ. of Chicago.....	.....	.....
	Maudie Bozarth.....	5	8. U. I.....	.....	.....
	Helen Maher.....	5	U. of Michigan.....	.....	.....
	Forest Z. Wheeler.....	3	3. U. I.....	.....	.....
Ft. Madison..	Margaret Mason.....	5	Smith College.....	.....	.....
	James C. Kendrick.....	5	Univ. Chi. ½ Iowa Wesleyan 3.....	I. S. N. S. 2.....	.....
	Owen L. Loran.....	6	Univ. Ill. ½ Ewing Col. 7.....	3. Ill. Nor. Univ. ½	Dixon Col. 1.....
	Nellie Kennedy.....	5	Iowa College 4.....	.....	.....
	Lucia Otto.....	3	3. U. I. 4.....	.....	.....
Galva.....	Marie Gardner.....	5	Gram. Eng. Sem. Milwaukee, Wis. 8.....	.....	.....
	F. L. Benschaw.....	4	.....	.....	Highland P. Col. 3
	Sophia Olmsted.....	6	U. of Wis. 4.....	.....	.....
Garden Grove..	E. Pearl Fancolly.....	6	.....	I. S. N. S. Sum. S.	Drake Sum. Sch.
	A. L. Lyon.....	6	.....	I. S. N. S. 1.....	Woodbine 4.....
	Mary Jane McCrea.....	7	Parsons Col. 3.....	.....	Corning Acad. 3.....
Garner....	Louise E. Twinam.....	7	Parsons Col. 4.....	.....	Parsons Acad. 3.....
	W. J. Jerome.....	4	Cornell Col. 1.....	.....	N. Ia. Nor. Col. 3
	Jessica I. Graham.....	4	Coe College 4.....	.....	Shueyville Nor. 3
Gilmore City..	Evangeline Grawe.....	6	.....	I. S. N. S. 1 term	.....
	H. I. Freeman.....	6	.....	I. S. N. S. 1 term	Hevens Pt. Wis. 1. Oskosh, Wis. ½
Gladbrook	L. A. Wilson.....	8	.....	.....	Humboldt Col. 3.
	Dellie Kilgore.....	9	.....	.....	Drake 1.....
Gladbrook	H. B. Shoemaker.....	8	Upper Ia. Univ. 6.....	.....	.....
	O. E. Thomas.....	8	.....	I. S. N. S. 1.....	.....

## —FOUR YEAR COURSES.

Preparation.	Yr's experience in H. S.	High School Courses.												
		Branches studied.			Number weeks.			Branches studied.			Number weeks.			
Degrees held.														
Ph. B., B. D.....	11	Algebra .....	54	5	40	Civics of U. S. ..	18	5	35	Political Econ..	18	5	40	
Ph. B. ....	6	Geometry.....	50	5	40	Physical Geog. ..	18	5	40	Botany.....	18	5	40	
Sc. B. ....		Arithmetic.....	12	5	35	Physics.....	36	5	40	Astronomy ..	18	5	35	
		Gen. History.....	36	5	35	English.....	138	5	35	Latin.....	144	5	35	
		U. S. History.....	12	5	40	Physiology.....	12	5	35					
		Algebra.....	54	5	40	Physical Geog. ..	18	5	40					
		Geometry.....	54	5	40	Physics.....	36	5	40	German.....	72	5	40	
		Arithmetic.....	18	5	40	English.....	144	5	40	Zoology.....	18	5	40	
		Hist. — Ancient.....	36	5	40	Physiology.....	18	5	40	Botany.....	18	5	40	
		U. S. History.....	36	5	40									
		Civics.....	18	5	40	Latin.....	144	5	40					

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in state Normal.	Years in other institutions above high school grade.
Glenwood.	L. H. Maus.....	2	Neb. Wes. Univ. 7		
	Fannie O. Ames.....	6	Drake 3/4	I. S. N. S. 3/4	
	Ellen O. Jackson.....	6		I. S. N. S. 3/4	
	Francois Towalee.....	5	Tabor Col. 2 Uni. Kan. 3.		
	Susan Jewell.....	6	Taber Col. 4.....		
Glidden...	J. W. Atchley.....	8		I. S. N. S. 4	
	Inez Palmer.....	5		I. S. N. S. 3	
	Florence Odell.....	5	S. U. I. 2		
	Alma Reichert.....	5		I. S. N. S. 3	
Goldfield..	O. H. Benson.....		S. U. I. Pt. of Yr.	I. S. N. S. - Pt. of Yr.	Epworth Sem. 3.
	Mrs. O. A. Hoelscher.....		Cornell Col. 4.....		Cornell Acad. 8..
Gowrie....		6			
	C. E. Cavett.....			I. S. N. S. 4	
	Mrs. C. E. Cavett.....			I. S. N. S. 4	
Grand Junction		7			
	Thomas R. Amlie.....	1	S. U. I. 2.....	I. S. N. S. 2 1/2	Uni. of Chi. 1 1/4 ..
	Calcuttine Ineze.....	7		I. S. N. S. 1 1/2	
Grand River ...					
	H. L. Coener.....	11	Drake.....		High Park.....
	Kate Hull.....	12		I. S. N. S.	
Grant Park .... (Des Moines)					
	T. E. McCarty.....	4		I. S. N. S.	
	Hazel Davison.....	7	Drake Uni. 4.....		
	Leona Garmong.....	8	Drake Uni. 3.....		
Greene....					
	Benjamin Boardman.....	4	S. U. I. 2.....	I. S. N. S. 3	
	Kate H. McDonald.....	7	Drake 4.....	I. S. N. S. 3	
	Mae M. Bower.....	7	Iowa State Col. 4		
Greenfield					
	P. P. Sullivan.....	4	Drake 6 1/2		
	Ernie Cameron.....	7	Drake 4.....		U. of Chicago. 1..
	Margaret Jackson.....	7	Tarkio Col. 3.....		U. of Chicago 3..
	D. R. Earl.....	2			

**-FOUR YEAR COURSES.**

Preparation.	Yrs experience in H.S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. per a. u.	Branches studied	Number weeks.	Rec. per week.	Rec. period	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
B. L.	9	Algebra	51	5	40	English	144	5	40	Geology	18	5	40
B. L.	6	Geometry	51	5	40	Physiology	18	5	40	Chemistry	36	5	40
B. Di.	4	Arithmetic	18	5	40	Political Econ	18	5	40	Zoology	18	5	40
A. B.	1 1/2	Gen. History	86	5	40	Botany	18	5	40	English History	18	5	40
A. B.	1 1/2	Civics	18	5	40	Latin	144	5	40	Book-keeping	18	5	40
		Physical Geog.	18	5	40					U. S. History	18	5	40
		Physics	3	5	40					Com. Geog.	18	5	40
M. Di.	4	Algebra	54	5	40	Physical Geog.	18	5	40	Latin	108	5	40
	2	Geometry	51	5	40	Physics	36	5	40	Bot. or Book-k.	36	5	40
	1	Arithmetic	18	5	40	English	126	5	40				
M. Di.		Gen. History	54	5	40	Physiology	18	5	40	German	108	5	40
		U. S. History	18	5	40	Political Econ	18	5	40	Bot. or Book-k.	36	5	40
		Civics	18	5	40	Latin	36	5	40				
B. Ph.	7	Algebra	54	5	40	Physics	36	5	40	Solid Geometry	36	5	45
	4	Geometry	51	5	40	English	180	5	40	Music	36	5	30
		Arithmetic	6	5	40	Physiology	18	5	40	Drawing	36	5	30
		Gen. History	36	5	40	Political Econ	18	5	40	Pennmanship	36	5	30
		U. S. History	18	5	35	Botany	18	5	40	Book-keeping	12	5	60
		Civics	30	5	35	Latin	72	5	45				
		Physical Geog.	18	5	35								
M. Di.	8	Algebra	51	5		Physical Geog.	18	5		Zoology	18	5	
M. Di.	1	Geometry	54	5		Physics	36	5		Geology	18	5	
		Arithmetic	18	5		English	90	5		Book-keeping	18	5	
		Gen. History	36	5		Physiology	18	5		Latin	72	5	
		U. S. History	18	5		Political Econ	18	5					
		Civics	36	5		Botany	18	5					
B. S. B. Ph.	9	Algebra	54	5	37	Civics	18	5	37	Latin	72	5	37
B. D.	1	Geometry	36	5	37	Physical Geog.	18	5	37				
		Arithmetic	36	5	37	Physics	36	5	37	Botany	18	5	37
		General Hist.	36	5	37	English	162	5	37	Book-keeping	18	5	37
		U. S. History	36	5	37	Political Econ.	18	5	37				
	8	Algebra	48	5	5	U. S. History	32	5	28	English	126	5	25
		Geometry	48	5	28	Civics	32	5	28	Physiology	48	5	25
		Arithmetic	48	5	3	Physical Geog.	32	5	28	Political Econ	16	5	25
		General Hist.	48	5	25	Physics	32	5	25	Orthography	32	5	25
Ph. B.	6	Algebra	54	5	0	U. S. History	18	5	40	English	108	5	40
	2	Geometry	51	5	40	Civics of U. S	18	5	40	Political Econ.	18	5	40
B. Pa.	1	Arithmetic	18	5	40	Physical Geog.	18	5	40	Book-keeping	18	5	40
		General Hist.	54	5	40	Physics	36	5	40	Latin	144	5	40
B. Ph. M. Di.	4 1/2	Algebra	48	5	35	Physical Geog.	18	5	35	Latin	108	5	35
M. Di.	8	Geometry	48	5	35	Physics	36	5	35				
	3 1/2	Arithmetic	36	5	35	English	144	5	35	Book-Keeping	24	5	35
		General Hist.	48	5	35	Physiology	18	5	35	History—Eng.	24	5	35
		U. S. History	12	5	35	Political Econ	18	5	35				
		Civics	4	5	35								
B. S.	10	Algebra	72	5	5	Physics	36	5	38	Arith. Review	18	5	35
A. B.	4	Geometry	63	5	37	English	108	5	38	Book-keeping	18	5	35
B. S.	8	Arithmetic	36	5	35	Physiology	18	5	35	Botany	18	5	35
		General Hist.	36	5	35	Political Econ	18	5	35	Astronomy	18	5	35
		U. S. History	18	5	35	Geology	18	5	35	Pedagogy	18	5	35
		Civics of Iowa	18	5	35	Latin	144	5	35	Psychology	18	5	35
		Physical Geog.	18	5	35								

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Grieanell..	Eugene Heneley .....	6	Iowa Col. 4 .....		Madison Sem. Sch
	Elizabeth Fisher .....	6	N. W. Univ. 4 .....		Grafton Nor. Sch. 5 wks.....
	Blanche Snider .....	6	Iowa Col. 4 .....		Univ of Ohio 1 ..
	Emma Johnson .....	6			
	Alice Dunham .....	5	Iowa Col. 5 .....		Sum. Sch. of Wash. Univ.....
	Katherine Macy .....	5	Iowa College 4 .....		Heidelberg Col. Berlin, Germ'y 1
			Wellesley Col. 1 .....		
	Mable Dunbar .....	5	Iowa Col. 4 .....		
	Sarah Nollen .....	5	Iowa College 5 .....		
	Ruth Field .....	7	Iowa College 4 .....		
Griewold..	Walter I. Griffith .....	5	S. U. I. 4 .....	I. S. N. S. 1 .....	
	G. U. Gordon .....	6	Indiana Col. 4 .....		N. I. N. S. ....
	Oora Selby .....	6		I. S. N. S. 3 .....	
	J. Ella Baker .....	4	Columbia Col. 3 .....		
Grundy Center ..			Clarksb'g. Col (Mo.) 1½ .....	Carbondale, Ill ½ .....	
	O. L. Love .....	8		I. S. N. S. 3 .....	
	O. M. Parker .....	5		I. S. N. S. 3 .....	
	Mary Green .....	4			Wheaton Sem. (Mass) 3 .....
	Maggie Gray .....	6	Coe College 4 .....		
Guthrie Center...	Clara Krause .....	6		I. S. N. S. 3 .....	
	O. V. Williams .....	5		Neb. State Nor. 5 .....	
	F. S. Blaser .....	6	Iowa Col. 4 .....		
	Eva Whitnell .....	6	Coe Col. 4 .....		
Guttenberg....	Charles F. Pye .....	4	Cornell Col. 3 .....		Ellsworth Col. 1.
	Edwinna Bolton .....	8	Univ. of Texas 1 .....		
	Emma E. Halkofen .....	8	Univ. of Iowa 2 .....		
Hamburg ..			Univ. of Iowa 4 .....		
	J. E. Clayton .....	4	S. U. I. 3 .....	I. S. N. S. 4 .....	Simpson Col. 1 ..
	Lida Hodge .....	7	S. U. I. 3 .....		Cottony Col. 3, (Nevada, Mo.) Conserv. of Music
	Helen C. Sayles .....	7	Iowa Col. 4 .....		
Hampton ..	Lovena Toedt .....	7			
	O. W. Maxwell .....	2	Simpson Col 4 .....		
	Verna Bernard .....	6	I. S. N. S. 3 .....		
	Ola A. Logen .....	4	I. S. N. S. 3 .....		
	Maude Stokes .....	5	Parsons Col. 4 .....		
			Wesley Col. 1 .....		
	Blanche Graham .....	6	Univ. Mich. 1 .....		
	Robert G. Miller .....	1	Univ. Chi. 1 .....		Nor'n Ind. Nor. 1
	Lillian Newton .....	2	Iowa State Col. 1 .....		Csp. O'y Cem. Col. 1
			Iowa Col. 4 .....		

**-FOUR YEAR COURSES.**

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H.S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number week.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
B. L.	4	Algebra.....	80	5	40	Electives.....	120	5	40	Political Econ..	15	5	40
B. L.	4	Geometry.....	51	5	40	Latin.....	108	5	40	Electives.....	90	5	40
Ph. B.	4	Gen'l. History	38	7	15					U. S. History..	12	5	40
A. B. A. M.	9	Physical Geog.	18	5	40					Civics of U. S.	24	5	40
		Physics.....	36	5	45	Bookkeeping...	36	5	40	Political Econ..	18	5	40
		English.....	144	5	40	Zoology.....	18	5	40	German.....	36	5	40
		Physiology...	18	5	40	(Geometry-Solid	18	5	40	Adv. English..	36	5	40
		Botany.....	18	5	40	Arithmetic.....	18	5	40				
A. B. A. M.	1	Latin-Begin..	36	5	40	Grammar.....	18	5	40				
Ph. B.	1												
Ph. B.	7												
A. B.	5												
B. S. A., M. Di.													
A. M.	8	Algebra.....	52	5	30	Civics of U. S..	20	5	35	Botany.....	20	5	35
		Geometry.....	36	5	35	Physical Geog..	24	5	30	Zoology.....	20	5	35
		Arithmetic...	20	6	30	Physics.....	20	5	30	Latin.....	90	5	35
		Gen'l. History	36	5	40	English.....	64	4	35				
	2	U. S. History	20	5	40	Political Econ..	116	5	39				
B. D.	7	Algebra.....	54	5	35	Political Econ..	18	5	35	English.....	86	5	35
M. Di.	1	Geometry.....	24	5	35	History of Iowa	6	5	35	Geology.....	18	5	35
		Arithmetic...	24	5	35					Zoology.....	18	5	35
		Gen'l. History	31	5	35	Latin.....	44	5	35	Eng Grammar	12	5	35
Ph. B.	1	U. S. History.	39	5	35	German.....	172	5	35	Reading.....	12	5	35
B. D.	3	Civics.....	18	5	35	English History	24	5	35	Physics.....	12	5	35
		Physical Geog.	24	5	35	Botany.....	18	5	35	Literature....	86	5	35
		Physics.....	48	5	35					Botany.....	18	5	35
		English.....	132	5	35	Bookkeeping...	18	5	35	Arithmetic...	24	5	35
		Physiology...	18	5	35	Word Analysis..	18	5	35	Review.....	36	5	35
Ped. B.	6	Algebra.....	72	5	35	Physical Geog..	18	5	35				
A. B.	2	Geometry.....	72	5	35	Physics.....	36	5	35	Latin.....	72	5	35
A. B.	3	Arithmetic...	18	5	35	English.....	144	5	35				
		Gen'l. History	36	5	35	Botany.....	18	5	35	German.....	36	5	35
		U. S. History.	36	5	35	English History	36	5	35	Adv. English..	36	5	35
		Civics.....	18	5	35	Latin.....	72	5	35				
B. Sc.	10	Algebra.....	56	5	45	Physics.....	24	5	45	American Lit.	40	5	40
B. Ph.	1	Geometry.....	80	5	45	English.....	144	5	45	Geology.....	24	5	40
		Arithmetic...	16	5	45	Political Econ..	18	5	40	German.....	180	5	40
		Gen'l. History	40	5	40	Botany.....	24	5	40	Physiology...	24	5	45
		U. S. History.	24	5	30	Pedagogy.....	16	5	45				
		Civics.....	32	5	40								
		Physical Geog.	16	5	40	Latin.....	180	5	40				
Ph. B. B. Di. M. Di.	11	Algebra.....	54	5	40	Physics.....	36	5	40	Physiology....	18	5	40
Ph. B.	6	Geometry.....	54	5	40	English.....	158	5	40	German.....	72	5	40
B. A.	1	Arithmetic...	18	5	40	Political Econ..	18	5	40	Zoology.....	18	5	40
		Gen'l. History	36	5	40	Botany.....	18	5	40	Bookkeeping...	18	5	40
		U. S. History.	18	5	40					Word Analysis	18	5	40
	1	Civics.....	18	5	40	Latin.....	144	5	40				
		Physical Geog.	18	5	40								
Ph. B.	14	Algebra.....	72	5	35	Physics.....	36	5	35				
B. Di.	8	Geometry.....	54	5	35	English.....	108	5	35	Bookkeeping...	36	5	35
B. Di.	3	Arithmetic...	18	5	35	Physiology...	18	5	35	Zoology.....	18	5	35
		General Hist.	36	5	35	Political Econ..	18	5	35	Com. Geog....	18	5	40
B. A.	3	U. S. Hist.	18	5	40	Botany.....	18	5	35	Classics.....	36	5	35
		Civics.....	18	5	40					Eng. Grammar	18	5	35
B. S.	14	Physical Geog..	18	5	40	Latin.....	144	5	35	Eng. Hist. ....	18	5	35
M. Acc't	14												
	7												

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Harlan ....	George H. Ballard .....	5	S. U. I. 3 .....	I. S. N. S. 1½ .....	N. Ind. Nor. Sch. 3
	Frances M. Gardner .....	7	S. U. I. 3 .....	.....	.....
	May A. Brown .....	7	Simson Col. 3 .....	I. S. N. S. 1 .....	.....
	Mary E. Polk .....	6	S. U. I. .....	.....	.....
	Mabel Ellis .....	2	Olivet Col. Mich. 2 .....	.....	Tabor Col. 1 .....
	Leta Smith .....	2	.....	.....	.....
	Elsie E. Whitford Music & Drawing .....	.....	.....	I. S. N. S. .....	.....
Hartley ...	Willis J. Bell .....	3	.....	I. S. N. S. 3½ .....	Univ. of Wis. ¼ ..
	Lila Crego .....	6	Iowa State Col. 1 .....	I. S. N. S. 1 .....	Epworth Sem. ½ ..
	Margaret Mitchell .....	6	.....	I. S. N. S. 3 .....	.....
	Pearl Woodford .....	6	Morningside Col. 6 .....	.....	.....
Hawarden	Samuel Thomas May .....	4	S. U. I. & U. of O. 2 .....	.....	Nw Ind Nor Sch. 2
	Estelle Helen F. ....	7	U. of Mich. ....	.....	.....
	Alice Margretta Waldron .....	7	S. U. I. ....	.....	.....
	Annie Moore .....	7	U. of Nebr. 4 .....	.....	Special student U. of Colo. 1 term...
	Edith Virginia Logan .....	2	.....	.....	.....
Hedrick..	H. F. Young .....	6	Parsons Col. 3 .....	.....	.....
	Erma L. Krout .....	4	Penn. Col. ....	I. S. N. S. ....	.....
	Bertha Ford .....	4	.....	.....	.....
	Nellie Henry .....	2	.....	.....	.....
H man ..	L. W. Fike .....	6	Wash. Univ. 4 .....	3. E. Pa. St. Nor 2 .....	.....
	Effie Longman .....	.....	.....	I. S. N. S. 3 .....	.....
Holstein...	R. A. Griffin .....	.....	Drake 6 .....	.....	.....
	Ethel M. Thomas .....	4	Drake 4 .....	.....	.....
	Sue Snyder .....	2	Drake 4 .....	.....	.....
	Fred Dan .....	5	.....	.....	.....
Hubbard	Geo. A. Glenn .....	7	.....	I. S. N. S. 4 .....	U. of Chi. ¼ .....
	Vera Lighthall .....	7	.....	I. S. N. S. 3 .....	.....
Humeston.	Ines F. Kelso .....	6	S. U. I. 4 .....	.....	.....
	Myrtle A. Dungan .....	8	Parsons Col. 3 .....	.....	.....
Hull.....	S. I. Neveln .....	7	Des Moines Col. 1 .....	I. S. N. S. 3 terms .....	Drake 1 term .....
	Anna Donnelly .....	8	Parsons Col. 4 .....	.....	.....

## —FOUR YEAR COURSES.

Preparation.	Yr's experience in H.S.	High School Courses.											
Degrees held.		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
A. M., M. Di., B. S.	7	Algebra .....	54	5	40	Physics .....	36	5	40	Electives.....	18	5	40
A. B.	8	Geometry .....	54	5	40	English .....	162	5	40				
	7	Arithmetic .....	54	5	40	Phys. or Book-k.	18	5	40	One or or .....	36	5	40
A. M.	2	General Hist. ....	36	5	40	Botany .....	18	5	40	Com. Geog. and	18	5	40
		U. S. Hist. ....	18	5	40	Latin .....	36	5	40	Political Econ..	18	5	40
	4	Civics .....	18	5	40					German .....	72	5	40
		Physical Geog. ....	18	5	40	Latin .....	108	5	40				
	2												
B. Di. M. Di. A. B.	6	Algebra .....	72	5	35	Physics .....	36	5	35				
	3	Geometry .....	51	5	35	English .....	185	5	35	Word Analysis.	24	5	35
M. Di.	7 1/2	Arithmetic .....	36	5	35	Political Econ.	18	5	35	Reading .....	12	5	35
B. S. D. P. S. B.		General Hist. ....	3	5	35	Botany .....	24	5	35	Zoology .....	18	5	35
		U. S. Hist. ....	18	5	35	Bookkeeping .....	18	5	35	Com'l Geog. ....	18	5	35
		Civics .....	24	5	35								
		Physical Geog. ....	24	5	35	Latin .....	144	5	35				
Ph. D. B., B. S.	15	Algebra .....	54	5	35	Political Econ. .	18	5	35				
	6	Geom. ....	54	5	35					Com. Arith. ....	26	5	35
Ph. B.		Arithmetic .....	18	5	35	Latin .....	144	5	35	Book Keeping ..	72	5	35
		Gen. History .....	36	5	35					German .....	86	5	35
A. B.		U. S. History .....	18	5	35	German .....	72	5	35	Elective .....	86	5	35
		Civics .....	18	5	35					Electives—			
		Physical Geog. ....	18	5	35	Didactics .....	36	5	35	Arithmetic .....	18	5	35
		Physics .....	36	5	35	Reviews .....	36	5	35	U. S. History ..	18	5	35
		English .....	132	5	35	Latin .....	72	5	35	Physiology .....	18	5	35
		Physiology .....	18	5	35								
	6	Algebra .....	61	5	35	Physical Geog. .	16	5	30	Latin .....	96	5	35
B. Di.	2	Geometry .....	42	5	35	Physics .....	52	5	30				
	1	Arithmetic .....	32	5	30	English .....	104	5	30	Eag. History ..	32	5	35
		General Hist. ....	32	5	30	Physiology .....	18	5	30	Pol. History ..	20	5	35
		U. S. History .....	16	5	30	Political Econ. .	12	5	30	Geology .....	12	5	35
		Civics .....	30	5	30								
A. B.	10	Algebra .....	40	5	15	U. S. History ...	30	5	25	English .....	92	4	25
		Geometry .....	30	5	25	Civics .....	36	5	25	Physiology .....	18	5	25
		Arithmetic .....	72	5	5	Physical Geog. .	25	5	25	Political Econ. .	18	5	25
		Gen. History .....	36	5	5	Physics .....	20	5	5	Latin .....	84	5	25
B. Pe. L. L. B.	7	Algebra .....	51	5	30	English .....	144	5	30	Botany .....	18	5	30
B. Pe.	8	Geometry .....	51	5	30	Political Econ. .	18	5	30	Reviews .....	36	5	30
M. Di.	1	Arithmetic .....	18	5	30	Zoology .....	18	5	30				
		Gen. History .....	36	5	30	Book-Keeping ..	18	5	30	German .....	144	5	30
		U. S. History .....	18	5	30					Reviews .....	36	5	30
		Civics .....	18	5	30	Latin .....	102	5	30				
		Physics .....	36	5	30	Physical Geog. .	18	5	30				
B. Di. M. Di.	4	Algebra .....	54	5	35	Civics .....	18	5	35	Political Econ. .	12	5	35
B. Di.	2	Geometry .....	51	5	40	Physical Geog. .	18	5	35	Botany .....	24	5	35
		Arithmetic .....	18	5	35	Physics .....	36	5	35	Book-keeping ..	12	5	30
		Gen. History .....	36	5	35	English Lit .....	126	5	35	Trig. Plane .....	18	5	40
		U. S. History .....	24	5	35	Physiology .....	18	5	35	Latin .....	108	5	40
Ph. B.	9	Algebra .....	54	5	35	U. S. History ...	18	5	35	English .....	144	5	35
	1	Geometry .....	54	5	35	Civics .....	18	5	35	Political Econ. .	18	5	35
		Arithmetic .....	36	5	35	Physical Geog. .	18	5	35				
		Gen. History .....	36	5	35	Physics .....	36	5	35				
	7	Algebra .....	54	5	40	U. S. History ...	18	5	30	English .....	108	2	30
A. B.		Geometry .....	36	5	40	Civics .....	18	5	30	Physiology .....	18	5	40
		Arithmetic .....	36	5	30	Physical Geog. .	18	5	40	Political Eco ..	18	5	40
		Gen. History .....	36	5	40	Physics .....	24	5	30	Botany .....	18	5	30

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Humboldt.	O. S. Cory.....	4	S. U. I. 2.....	I. S. N. S. 3.....	North Ind. Nor..
	Sedona L. Eesenbeck.....	6	Des Moines Col. 1.....	I. S. N. S. 3.....	Drake 1 term.....
	Abigail H. Heaton.....	8	Parsons Col. 4.....	I. S. N. S. 3.....	.....
	E. Beth Achenbach.....	7	S. U. I. 2.....	I. S. N. S. 4.....	.....
	Mrs. Sally Coyle.....	8	S. U. I. 5.....	.....	.....
Ida Grove.	L. A. Ink.....	6	Mulenbry Col. 4.....	.....	East Strouds- burg, 2..
	N. A. Burk.....	6	.....	Cent. Mich. 4.....	.....
	Helen Williams.....	6	S. U. I. 1.....	I. S. N. S. 3.....	.....
	Bertha Riedesel.....	6	Rockford Col. 2.....	.....	Rockford Prep. Col. 2.....
	.....	.....	N. of Wis. 2.....	.....	.....
	Minnie Willits.....	6	.....	I. S. N. S. 3.....	.....
	R. S. Whitley.....	1	Iowa Col. 4½.....	.....	Iowa Col. Acad. 1.
	Bertha Day, Music & Draw	.....	.....	.....	Drake 1 Chi. Ner. 1
	Marie Seward.....	6	Wellesley 4.....	.....	.....
	.....	.....	.....	.....	.....
Independence..	Clara M. Travis.....	.....	.....	I. S. N. S. 3.....	Drake-Sum. Sch.
	Oora B. Beach.....	6	Upper Iowa Uni. 4.....	.....	.....
	May Williams.....	4	U. of Mich. 1.....	.....	Uni. Ex. 1 course.
	Mrs. J. L. Buechele.....	5	.....	I. S. N. S. Summer	.....
	Sarah MacDonald.....	5	.....	I. S. N. S. 3.....	Lenox Col. 3 ter.
	Emma Funk.....	5	.....	I. S. N. S. 4.....	.....
	Zella Jewell.....	5	.....	.....	.....
Indianola..	O. E. Smith.....	2	Simpson 4.....	.....	.....
	S. A. Krell.....	3	Simpson 4.....	.....	.....
	Winifred Morris.....	7	S. U. I. 1.....	I. S. N. S. 1½.....	.....
	E. C. Jones.....	8	Simpson 2.....	.....	.....
	Anna B. Perry.....	1	Simpson 4.....	.....	.....
	Alma Robbline.....	6	Simpson 4.....	.....	.....
	Altha Haviland.....	7	Uni. of Ill. 8.....	.....	.....
Ionia.....	Lewis Currell.....	.....	Cornell Col. 1.....	I. S. N. S. 3.....	.....
	Mabel Nash.....	.....	.....	I. S. N. S. 3.....	.....
	Dora Kruger.....	.....	.....	I. S. N. S. 1.....	.....
	— Gorman.....	.....	.....	I. S. N. S. ....	Clinton Inst.....
Iowa City.	S. K. Stevenson.....	1	S. U. I. 4.....	.....	.....
	E. R. Collins.....	2	S. U. I. 3.....	.....	.....
	Clementine Otto.....	6	S. U. I. 4.....	I. S. N. S. 1.....	So. Ia. Nor. Sch. 3
	Harriet Clearman.....	5	S. U. I. 7.....	.....	.....
	Antonia J. Stober.....	6	S. U. I. 4.....	.....	U. of Chicago 1..
	Mabel Foster.....	6	S. U. I. 4.....	.....	.....
	Grace O'Hair.....	5	U. of Minn. 4.....	.....	.....
	F. H. Randall.....	6	S. U. I. 4.....	.....	.....
	A. D. Whedon.....	5	S. U. I. 3.....	.....	.....
	J. A. Meade.....	5	S. U. I. 1 Ia. Col. 3	.....	Ia. State Col. 1..
	L. F. Meade.....	5	Iowa Col. 4.....	.....	S. U. I. 3.....
	Mary Lytle.....	4	S. U. I. 4.....	.....	.....
	E. W. B. Mark.....	6	S. U. I. 2.....	I. S. N. S. 2½.....	Gen. Wes. Col. 3.
	Albert F. Stepert.....	.....	S. U. I. 1.....	.....	Bradley Polytechnic..

**-FOUR YEAR COURSES.**

Preparation.		H.S. Years exp. in high school	High School Courses.										
Degrees held.	Branches studied		Number weeks.	Rec. per week.	Rec. period.	Branches studied	Number weeks.	Rec. per week.	Rec. period.	Branches studied	Number weeks.	Rec. per week.	Rec. period.
B. S. M. Di.	5	Algebra	54	5	35	Latin	144	5	35	Roman Hist.	18	5	35
A. B. M. Di.	1	Geometry	36	5	35	Elective	18	5	35	Book-keeping	18	5	35
B. S.	4	Arithmetic	18	5	35	German	72	5	35	Botany	18	5	35
B. S. M. Di.	1	Gen. History	36	5	35	Electives	90	5	35	German	72	5	35
A. B.	1	U. S. History	18	5	35	Electives	162	5	35	Eog. Hist.	18	5	35
		Civics	18	5	35	Com. Arith.	18	5	35	Geom. Solid.	18	5	35
		Physical Geog.	18	5	35	Com. Geog.	18	5	35	Economics	18	5	35
		Physics	36	5	35					Chemistry	36	5	35
		English	144	5	35								
		Physiology	18	5	35								
		Orthography	18	5	35								
A. B.	2	Algebra	72	5	35	English	144	5	35	Electives—			
B. Di.	2	Geometry	54	5	35	Political Econ.	18	5	35	Mannual Training	144	5	35
		Arithmetic	18	5	35	Latin	144	5	35	Drawing	144	5	35
		Gen. History	36	5	35	Eog. Hist.	18	5	35	Modern Hist.	36	5	35
B. L.	1	U. S. History	18	5	35	German	72	5	35	Botany	18	5	35
B. Di.		Civics	18	5	35	Elective	72	5	35	Book-keeping	18	5	35
Ph. B.		Physical Geog.	18	5	35								
		Physics	36	5	35								
A. B.													
B. D.	17	Algebra	36	5	40	Geometry	54	5	40	Botany	18	5	40
B. S.	3	Arithmetic	18	5	40	Algebra	36	5	40	Astronomy	18	5	40
	3	U. S. History	18	5	40	Gen. History	36	5	40	Com. Law	18	5	40
	11	Civics	18	5	40	Eog. History	18	5	40	Zoology	18	5	40
B. D.	6	Physical Geog.	18	5	40	Physics or Eng. L.	36	5	40	Eng. Lit.	36	5	40
B. S.	13	English	144	5	40	Algebra	54	5	40	Physics	36	5	40
		Physiology	18	5	40	Geometry	54	5	40	Gen. History	36	5	40
		Political Econ.	18	5	40	Bus. Forms.	18	5	40	Eng. History	18	5	40
		Latin	144	5	40	Book-keeping	18	5	40	Business Course	324	5	40
M. S.	20	Algebra	54	5	40	Latin	144	5	40	German	72	5	40
M. S.	2	Geometry	54	5	40	English History	18	5	40				
Ph. B. M. Di.	8	Arithmetic	18	5	40	Zoology	18	5	40				
	1	General Hist.	36	5	40	Botany	18	5	40				
Ph. B.		U. S. History	18	5	40	Civics	18	5	40				
Ph. B.		Physics	36	5	40	Physiology	18	5	40				
	1	English Lit.	144	5	40	Physical Geog.	36	5	40				
B. Di.		Algebra	54	5	25	Civics	36	5	25	Political Econ.	24	5	25
	1	Geometry	36	5	25	Physical Geog.	32	5	25	Botany	12	5	25
	4	Arithmetic	64	5	25	Physics	24	5	25	Latin	72	5	25
	8	General Hist.	36	5	25	English	108	5	25				
		U. S. History	54	5	25	Physiology	48	5	25				
B. Ph.	2	Algebra	57	5	40	Physiology	19	5	30	Botany	18	5	30
B. S. M. A.	8	Geometry	57	5	40	Political Econ.	19	5	40	German	76	5	40
B. Ph.	8	Arithmetic	19	5	40					Book-keeping	38	5	40
M. S.	6	General Hist.	88	5	40	Latin	152	5	40	Chemistry or	38	5	40
Ph. B.	6	U. S. History	19	5	40	Hist., Ancient	38	5	40	Civics and	19	5	40
Ph. B.	4	Civics	19	5	40	Chemistry	88	5	30	Economics	19	5	40
B. L.	4	Physical Geog.	19	5	40	Electives							
A. B.	4	Physics	88	5	30	Hist., Ancient	38	5	40	Man. Train.	76	5	40
	5	English	152	5	40	Zoology	19	5	30	Draw-free hand	38	5	40
Ph. B.	2												
Ph. B.	2												
B. Ph.	4												
B. S. M. Di.	4												
	2												

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Iowa Falls	H. E. Blackmar .....	1	S. U. I. 2 .....	I. S. N. S. 3 .....	
	Imo Moler .....	5	S. U. I. 4 .....		
	Don Campbell .....	5		I. S. N. S. 4 .....	
	Elizabeth Carroll .....	5	S. U. I. 4 .....		
	Clara D. Brown .....	5			
	Alice Clark .....	6			Extensive work with tutors. Work with tutor 5 Sum. terms at S. U. I. and o colleges .....
Jefferson..	F. E. Palmer .....	2	Iowa Col. 4 .....		
	Nellie Dority .....	5		I. S. N. S. 4 .....	
	Mayme Remick .....	6	Cornell Col. 4 .....		
	Flora Parsons .....	6	Iowa Col. 4 .....		
	David B. McIlravy .....	5		I. S. N. S. 4 .....	
Jewell ....	A. R. Gardiner .....	6			High. Pk. Col. 2. Drake sum. ses. S. U. I. sum. ses..
	Lena M. Mo'ing .....	9	Univ. of Mo. 1 S U. I. 8 .....		
Kanawha..	George H. Mount .....		Parsons Col. 5 .....	I. S. N. S. 1 .....	
	Carl W. Maynard .....		Morningside Col. 4 .....		
Kellog ....	T. M. Phillips .....	7		I. S. N. S. 2 term..	Newton Nor. C. 2
	Jay Gaines .....	1	Bur. Bapt. Col. 2 .....		I. W. U. 2 terms..
Keokuk ...	William Aldrich .....				
	Iesse Benjamin .....	4		S. N. Albany N. Y. 2 .....	
	Elizabeth Ballard .....	4	Wellesley Col. 4 U of Chi. 1/4 .....		Private work in Ger. in Germ. 1 1/2 S. U. I. 1/4 U. of Chi. 1/4 U. of Mich. 1/4 ..
	(1) A. Arthur Utt .....	4	Cornell Col. 4 .....		
	Florence Backus .....	6	Oberlin Col. 4 .....		
	Lucia G. Pittman .....	4	U. of Chicago 2 .....		
	S. Marion Becker .....	5	Rockford Col. 2 .....	I. S. N. S. 1 1/2 .....	Chi. Nor. 1/4 .....
	Bertha R. Craig .....	6	Newsham Col. 1/2 Cambridge Eng .....		Stor. Sch. Lang. 1 U. of Chi. 1 ..
	Alta Ritter .....	6	U. of Ind. 4 .....		
	Harriet Solomon .....	6			
	Jessie Wilson .....	5			
	Marie Kiedalsch .....	8	U. of Chicago 4 .....		

**-FOUR YEAR COURSES.**

Preparation.		Yr's experience in H.S.	High School Courses.											
Degrees held.	Branches studied.		Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	
Ph. B. M. Di.	15	Algebra	51	5	40	Physics	86	5	40	Physical Geog.	86	5	40	
Ph. B.	4	Geometry	51	5	40	English	108	5	40	Zoology	18	5	40	
B. Di.	3	Arithmetic	36	5	40	Physiology	18	5	40	Botany	18	5	40	
Ph. B.	4	General Hist.	36	5	40	Political Econ.	18	5	40	Geology	18	5	40	
		U. S. History	18	5	40					Astronomy	18	5	40	
	12	Civics	18	5	40	Latin	144	5	40					
	27													
A. B.	17	Algebra	72	5	45	Physiology	18	5	45	Physiology	18	5	45	
M. Di.	6	Geometry	36	5	45	Orthography	18	5	45	Com. Law	18	5	45	
Ph. B.	2	General Hist.	36	5	45	Physiography	18	5	45	Geog.-Com.	18	5	45	
Ph. B.		Civics	18	5	45	Astronomy	18	5	45	Physiography	18	5	45	
M. Di.		Physics	36	5	45	German	72	5	45	U. S. History	18	5	45	
		English	144	5	45	U. S. History	18	5	45	Economics	18	5	45	
		Botany	18	5	45	Book-keeping	36	5	45	Pedagogy	18	5	45	
		Latin	144	5	45	Orthography	18	5	45	Astronomy	18	5	45	
		German	72	5	45	Physics	24	5	25	Pennmanship	108	5	30	
		Algebra	72	5	40	English	84	5	30	Music	108	5	30	
	10	Geometry	36	5	40	Physiology	12	5	30	Word Analysis	36	5	30	
		Arithmetic	36	5	40	Political Econ.	44	5	30	Geog. (Polit.)	36	5	30	
B. Ph.		Gen. History	36	5	40	Orthography	18	5	30	Physiology	36	5	30	
		U. S. History	72	5	40	Book-keeping	18	5	30	Reading	36	5	30	
		Civics	24	5	40	Commercial Law	18	5	30					
		Physical Geog.	24	5	40									
M. Di. A. B.	2	Algebra	54	5	35	Physical Geog.	18	5	35	Botany	18	5	35	
A. B.		Geometry	54	5	35	Physics	36	5	35	Book-keeping	18	5	35	
		Arithmetic	36	5	35	English	156	5	35	German	72	5	35	
		Gen. History	36	5	35	Physiology	18	5	35					
		U. S. History	18	5	35	Latin	144	5	35					
		Civics	18	5	35									
B. Di.	4	Algebra	54	5	35	Civics	18	5	30	Political Econ.	18	5	30	
		Geometry	36	5	35	Physical Geog.	18	5	30	Botany	18	5	30	
		Arithmetic	18	5	35	Physics	36	5	30	Com'l Geog.	18	5	30	
		Gen. History	90	5	30	English	126	5	30	Latin	72	5	30	
		U. S. History	18	5	30	Physiology	18	5	30					
	17	Algebra	54	5	45	Latin	144	5	45	U. S. History	36	5	45	
		Geometry	54	5	45	Chemistry	36	5	45	American Lit.	36	5	45	
		Gen. History	72	5	45	Astronomy	18	5	45	Eng. Literature	36	5	45	
		Civics	18	5	45	Physiography	18	5	45					
	8	Physics	36	5	45					Chemistry	36	5	45	
B. S.	18	English	72	5	45	Chemistry	36	5	45	Astronomy	18	5	45	
B. S.	18	Political Econ.	18	5	45	Astronomy	18	5	45	Physiography	18	5	45	
Ph. B.	25	Biology	36	5	45	Physiography	18	5	45	Latin	72	5	45	
	1					Eng. History	36	5	45	German	72	5	45	
M. Di.	7													
	14													
A. B.	6													
	10													
	2													
Ph. B.														

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Keosauqua	David Williams .....	7	.....	Pa. State Nor. 2.	
	Catherine Cooke .....	8	.....	I. S. N. S. 6 wks.	
	Phyllis H. Roberts .....	8	.....	I. S. N. S. 10 wks.	
Keota ....	Chas. Yeager .....	6	S. U. I. 1 .....	I. S. N. S. 4 .....	
	F. Bernice Williams .....	7	.....	Drake Nor.	
	Agnes Brown .....	4	.....	I. S. N. S. ....	
Kingsley ..	A. L. Halstead .....	5	.....	I. S. N. S. 4 .....	
	Mrs. Tripp .....	6	.....	.....	
	Miss McEachron .....	8	.....	I. S. N. S. 3 .....	
Knoxville.	S. G. Richards .....	2	Drake 2 .....	.....	
	F. M. Frush .....	3	Shuntliff Col. 4 .....	.....	
	Earl B. Young .....	6	Coe 4 .....	.....	
	Leah Durand .....	6	Drake 5 .....	.....	
	Elizabeth Bailey .....	6	.....	I. S. N. S. (Sum.) 2	Drake (Sum.) 2; H. P. Col. (Sum.) 1
Lacona ....	Ernest Tinkle .....	8	.....	I. S. N. S. 2 terms	
	Nellie Vale .....	9	Simpson Col. ....	.....	
Lake City.	Theodore J. Saam .....	2	Lenox College 3 .....	.....	
	Miss Goble .....	4	S. U. I. 2 .....	I. S. N. —1 term ..	Ger. Pres. Sem 2
	Alice Fairfield .....	4	U. of Chicago 3 .....	.....	
	Jane Starata .....	5	Oberlin, Col. 4 .....	.....	
	Arthur Bruce .....	5	S. U. I. 4 .....	.....	
Lake Mills	W. H. Overmyer .....	6	Ohio Wes. 2 .....	.....	Ohio Nor. Uni. 4; Cor. U. (N. Y.).
	Florence M. Cate .....	7	Morningside Col. 5 .....	.....	
	Maud E. Thomas .....	7	.....	I. S. N. S. 2½ .....	
Lake Park	C. F. Kuehne .....	8	.....	I. S. N. S. 4 .....	
	Margaret McCormick .....	8	.....	I. S. N. S. 1 .....	

**—FOUR YEAR COURSES.**

Preparation.		High School Courses.											
Degrees held.	Yrs experience in H.S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. periods.
M. E.	12	Algebra	64	5	30	Physical Geog.	32	5	30	Latin	64	5	30
		Geometry	32	5	30	Physics	32	5	30				
		Arithmetic	32	5	35	English	96	5	30	Word Analysis	16	5	30
		Gen. History	32	5	30	Physiology	18	5	30	Book-keeping	16	5	30
		U. S. History	64	5	30	Political Econ.	16	5	30				
		Civics	32	5	30								
M. Di.	5	Algebra	60	5	40	U. S. History	24	5	35	English	182	5	35
	3	Geometry	36	5	40	Civics	24	5	35	Physiology	12	5	35
	1	Arithmetic	60	5	40	Physical Geog.	18	5	35	Political Econ.	12	5	35
		Gen. History	36	5	40	Physics	33	5	40	Latin	72	5	35
A. B.	4	Algebra	54	5	45	Civics	18	5	45	Botany	86	5	45
	11½	Geometry	54	5	45	Physical Geog.	28	5	40	Book-keeping	16	5	45
B. Di.		Arithmetic	18	5	45	Physics	36	5	45	Latin	108	5	45
		Gen. History	44	5	45	English	108	5	45				
		U. S. History	18	5	45	Political Econ.	30	5	45				
B. E.	15	Algebra	54	5	45	English	126	5	45				
	5	Geometry	54	5	45	Political Econ.	18	5	45	Physiology	18	5	45
Ph. B.		Arithmetic	18	4	45	Botany	13	5	45	Orthography	18	5	45
A. B.	1	Gen. History	36	5	45	Classics	18	4	45	Com'l Geog.	18	5	45
		U. S. History	18	5	45	Book-keeping	18	5	45	Com'l Arith	18	5	45
	5	Civics of U. S.	18	4	45	English History	18	5	45	1st yr. German	32	5	45
		Physical Geog.	18	5	4					2nd yr. German	36	5	45
		Physics	32	4	45	Latin	144	5	45				
	1	Algebra	72	5	30	Physical Geog.	18	5	30	English History	18	5	30
	1	Geometry	36	5	30	Physics	36	5	30				
		Arithmetic	36	5	30	English	132	5	30	Latin	72	5	30
		Gen. History	36	5	30	Physiology	18	5	30				
		U. S. History	36	5	30	Political Econ.	16	5	30	Book-keeping	72	5	30
		Civics	36	5	30	Botany	16	5	30				
B. S. A. M.	5	Algebra	54	5	45	Physical Geog.	18	5	45				
	4	Geometry	54	5	45	Physics	36	5	45	One elective in each year of the course			
	3	Arithmetic	18	5	45	English	126	5	45				
A. B.	3	U. S. History	18	5	45	Ancient Hist.	32	5	45				
A. B.	3	Civics	18	5	45	Modern History	32	5	45				
B. S. M. A.	5	Algebra	54	5	35	Political Econ.	18	5	35	Elem. Civics	16	5	35
	5	Geometry	54	5	35	Botany	18	5	35	Modern History	18	5	35
B. H. B. S.	5	General Hist.	36	5	35	Math. — Review	18	5	35	Arithmetic	18	5	35
B. D.		U. S. History	18	5	35	Spelling	144	1	35	Book-keeping	18	5	35
		Civics	18	5	35	Music	144	1	35	Coml. Law	18	5	35
		Physical Geog.	18	5	35	Drawing	144	2	30	Geology	18	5	35
		Physics	36	5	35					Zoology	18	5	35
		English	126	5	35	Latin	144	5	35				
		Physiology	18	5	35								
M. Di.		Algebra	54	5	30	Physics	36	5	30				
		Geometry	36	5	30	English	126	5	35	Zoology	36	5	30
		Arithmetic	36	5	30	Physiology	18	5	34	Book-keeping	18	5	35
		General Hist.	36	5	30	Political Econ.	18	5	30	Botany	18	5	30
		U. S. History	18	5	30					Pedagogy	36	5	30
		Civics	36	5	30	Latin	108	5	30	School Mng.	18	5	30
		Physical Geog.	18	5	30					Advanced Eng.	36	5	30
										Adv. H.S. Arith	36	5	30

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Lamoni ...	E. L. Kelley, Jr. ....	4	S. U. I 8 .....	.....	Graceland Col. 2 ..
	Mary L. Sporleder .....	6	S. U. I 4 .....	.....	.....
	Grace M. Miller .....	..	Buena Vista Col. 3 S. U. I 1 .....	.....	.....
Lamont. ..	P. O. Arildson .....	8	N. W. U. (Evan- ston) 2 .....	.....	.....
	Maud M. Blunt. ....	8	Upper Ia. U. 4 .....	.....	.....
Lansing. ..	W. H. Ray .....	4	.....	I. S. N. S. 4 .....	U. of Wis. 1 term S. Dakota Uni. 1 tm., S. U. I. 1 tm.
	Minnie L. Wilson. ....	6	I. S. N. S. 3 .....	.....	.....
	Georgia L. Whitley .....	..	Upper Iowa U. 6 .....	.....	.....
Laurens ..	W. H. Reeve .....	2	S. U. I. ('97) .....	I. S. N. S. ('95) ..	.....
	Gertrude Crane .....	7	Cornell College ..	I. S. N. S. ('03) ..	.....
	Juno Baker .....	6	Drake .....	.....	.....
Le Mars... ..	Alice Dilley .....	8 1/2	N. W. Univ. Lebanon, O. 8 .....	.....	.....
	Margaret Cummings..	5	Iowa Col. 4 .....	.....	.....
	Katherine Ives .....	6	.....	I. S. N. S. 5 .....	.....
	Jessie Hellsell .....	6	Univ. Michigan 4 ..	.....	Ferry Hall, Lake Forest, Ill. 3 .....
	Gylvia Smith .....	5	.....	I. S. N. S. 2 .....	.....
	W. F. Yingling .....	5	Valparaiso Uni. 4 ..	.....	.....
	W. A. Blackwell .....	5	Morningside C. 4 ..	.....	.....
	Martha Wasson .....	5	Knox Col. 4 .....	.....	.....
Lenox.....	F. E. Kuhn .....	3	.....	I. S. N. S. 3 .....	.....
	Ella Lund .....	7	.....	I. S. N. S. 4 .....	.....
	Albie Nelson .....	1	.....	I. S. N. S. 2 .....	.....
Leon .....	J. M. Pierce .....	6	.....	I. S. N. S. 4 .....	Western Nor. 1..
	Hattie Drake .....	2	.....	.....	Valparaiso .....
	Grace Morrill .....	6	.....	.....	.....

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yrs experience in H.S.	High School Courses.											
			Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
B. Ph. ....		2	Algebra .....	54	5	40	English .....	144	6	40				
B. Ph. ....		1	Geometry .....	54	5	40	Botany .....	18	5	40	Iowa H. & C. ..	18	5	40
			Arithmetic .....	36	5	40	Latin .....	72	5	40	Physical Geog. ..	18	5	40
B. A. ....			U. S. History .....	18	5	40					Physiology .....	18	5	40
			Civics of U. S. .....	18	5	40	Latin .....	72	5	40	Political Econ. ..	18	5	40
			Physics .....	36	5	40								
			Eng. Grammar .....	18	5	40	German .....	72	5	40				
			Algebra .....	72	5	30	Civics .....	18	5	30	Political Econ. ..	18	5	30
		6	Geometry .....	36	5	35	Physical Geog. ..	18	5	30	Botany .....	18	5	30
B. S. ....			Arithmetic .....	36	5	30	Physics .....	36	5	35	Latin .....	72	5	30
			General Hist. ....	36	5	30	English .....	90	5	30	Reviews .....	32	5	30
			U. S. History .....	36	5	30	Physiology .....	18	5	30				
			Algebra .....	54	5	40	Civics .....	18	5	40	Political Econ. ..	18	5	40
			Geometry .....	36	5	40	Physical Geog. ..	36	5	40	Botany .....	18	5	40
B. Di., M. Di. ....		5	Arithmetic .....	18	5	40	Physics .....	36	5	40	Book-keeping .....	18	5	40
B. Di. ....			Gen. History .....	36	5	40	English .....	144	5	40	Geology .....	18	5	40
Ph. B. ....			U. S. History .....	18	5	40	Physiology .....	18	5	40	Latin .....	108	5	40
B. Ph., M. Di. ....		8	Algebra .....	54	5	45	Civics .....	36	5	45	Botany .....	18	5	45
B. Di. ....		8	Geometry .....	54	5	45	Physical Geog. ..	18	5	45	Word Analysis ..	18	5	45
		1	Arithmetic .....	18	5	45	Physics .....	36	5	45	Latin .....	108	5	45
			Gen. History .....	36	5	45	English .....	126	5	45				
			U. S. History .....	18	5	45	Physiology .....	18	5	45				
B. A. ....		13	Algebra .....	36	5	40	10. Botany .....	36	5	40	or 5, 7, 10, 11,			
Ph. B. ....		6	Geometry .....	18	5	40	11. Algebra .....	18	5	40	13 and 14 .....			
M. Di. ....		6	Arithmetic .....	18	5	40	12. Chemistry .....	36	5	40	III. 2; 3; 6; 8; 9			
			American Hist. ....	36	5	4	13. Economics .....	18	5	40	IV. 3; 7 or 10 or			
A. B. ....			Civics .....	18	5	40	14. Com. Law .....	18	5	40	15 or 16 .....			
B. Di. ....		4	Physics .....	36	5	40	15. Book-keep'g ..	36	5	40	VI. 6; 8; 9; 10;			
B. S., B. A. ....		4	English .....	144	5	40	16. Com. Arith. ....	36	5	40	11, 5, 13 and 14			
Ph. B. ....		2	Roman History .....	18	5	40	17. Man. Train. ....	72	5	40	or 3; 7 or 15; 12;			
B. S. ....		3	Add. subjects .....	18	5	40	18. Com. Geog. ....	18	5	40	VII. 16; 17; 15			
			1. Latin .....	44	5	40	19. Mental. Ar. ....	18	5	40	or 8 and 9; 5 or			
			2. Latin .....	72	5	40	20. Bus. Cor. ....	18	5	40	20; 15; 21; 14; 13			
			3. German .....	72	5	40	21. Typewriting .....	36	5	40	VIII. 6; 8, 9, 10			
			4. Geometry .....	36	5	40	Courses, Addi-				and 2 or 1; 17			
			5. Geom. — S .....	18	5	40	tional subjects				IX. 6; 16; 7 or 8			
			6. Hist.—Greek .....	18	5	40	indicated by				and 5; 15; 14;			
			7. Hist.—Eng. ....	36	5	40	number.				13; 18; 20; 21.			
			8. Phys. Geog. ....	18	5	40	I. 1; 4; 6; 8; 9.							
			9. Physiology .....	18	5	40	II. 6; 8; 9; 13; 1							
M. Di. ....		7	Algebra .....	54	5	45	Physics .....	36	5	45	Book-keeping .....	18	5	90
M. Di. ....		8	Geometry .....	54	5	45	English .....	162	5	45	Botany .....	18	5	45
		3	Arithmetic .....	18	5	45	Physiology .....	18	5	45	Zoology .....	18	5	45
			Gen. History .....	36	5	45	Political Econ. ....	18	5	45	Geology .....	14	5	45
			U. S. History .....	18	5	45					Etymology .....	18	5	45
			Civics .....	18	5	45	Latin .....	144	5	45				
			Physical Geog. ....	18	5	45								
B. A. ....		5	Algebra .....	54	5	45	English .....	144	5	90	Political Econ. ..	18	5	30
			Geometry .....	54	5	90	Physiology .....	20	5	90	Book-keeping .....	18	5	35
			Arithmetic .....	36	5	37	Orthography .....	36	5	90	Mental Arith. ....	18	5	90
			Gen. History .....	36	5	90					Com. Law .....	24	5	90
			U. S. History .....	36	5	90	Latin .....	126	5	90	Higher Arith. ....	24	5	45
			Civics .....	36	5	90	Physiography .....	24	5	90	Review .....	12	5	40
			Physics .....	36	5	35	Botany .....	12	5	90				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Lewis.....	Richard A. Smith.....	8	Cornell Col. 4.....	.....	.....
	Edna Wells.....	8	.....	I. S. N. S. ....	.....
Lime..... Springs.....	F. A. Welch.....	6	Univ. of Wis. 1½ Otr. Col. Ill. 4...	.....	.....
	France O. Earhart .....	.....	.....	.....	Lenox Col. Ia. 4..
Lisbon.....	Payson W. Peterson.....	6	Beloit Col. 4 .....	.....	.....
	Esthela Burge.....	7	Cornell Col. 4.....	.....	.....
	Laura Adams .....	6	Cornell Col. 4.....	.....	.....
Little..... Sioux.....	E. D. Leonard.....	11	Drake 1.....	.....	Calhoun Co. Nor. School
	Lulu Reeves.....	6	.....	.....	Woodbine Nor. 1.
Livermore.....	J. A. Eckenroed.....	6	H. Pk. Col 1 .....	I. S. N. S. 1.....	N. Springs Sem. 2
	Emma Arent.....	7	.....	I. S. N. S. 4.....	.....
	Mrs. C. Hunt .....	8	.....	I. S. N. S. 8.....	.....
Lorimor.....	J. F. Groves.....	6	Ewing Bap. Col. 7	Ill. St. Nor. 1.....	.....
	Mrs. L. B. Cain.....	7	.....	.....	Normal Sch. 2...
Lyons.....	J. R. Bowman.....	1	Iowa Col. 8.....	.....	.....
	T. H. Ziegler.....	3	Iowa Col. 4.....	.....	.....
	Katheryn M. Taylor.....	5	9. U. I. 8.....	.....	.....
	Elizabeth N. Blanding .....	6	John B. Stetson U.	.....	Univ. of Chi.....
	Edith L. Long.....	6	N. W. Univ. 4.....	.....	.....
	R. E. Scott.....	6	Univ. of Chi. 1½.	I. S. N. S. 2.....	.....
	H. D. Rosenburg.....	9	Addison Col 5.....	.....	.....
Malcolm.....	C. E. Shutt.....	8	Kan. State Univ. 3	Kan. State Nor. 1	.....
	Fan Farmer Lilly .....	8	S. U. I. 4.....	.....	O'y Nor. Sch. 1. Burlington .....
Malvern.....	Owen P. Stewart.....	8	Neb. Wesleyan 8.....	.....	Neb. Wesleyan. 6
	Mae Miller.....	.....	.....	I. S. N. S. ....	Western Normal.
	Bertha Williams.....	.....	Simpson Col.....	Nor. Ill. St. Nor.	.....
Manchester. ter.	Amv Boogs.....	2	Cornell Col. 4.....	.....	Univ. of Chi.....
	E. Ethel Cooper.....	5	Albion, Col. Mich	.....	.....
	Maude Graham.....	5	Cornell Col. 4.....	.....	.....
	Elizabeth Williston.....	6	Oberlin Col. 4.....	.....	.....
	Lucy Abel.....	1	Univ. of Kan. 4.....	.....	.....

## —FOUR YEAR COURSES.

Preparations.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.	Number weeks.	Rec. per week.	H. S. period.	Branches studied.	Number weeks.	Rec. per week.	H. S. period.	Branches studied.	Number weeks.	Rec. per week.	H. S. period.
A. B. ....	.....	Algebra .....	72	5	35	Civics .....	86	5	35	Political Econ. ....	18	5	35
B. Di. ....	.....	Geometry .....	36	5	35	Physical Geog. ....	86	5	35	Botany .....	18	5	35
		Arithmetic .....	18	5	35	Physics .....	36	5	35	Astronomy .....	18	5	35
		Gen. History .....	36	5	35	English .....	128	5	35	Latin .....	72	5	35
		U. S. History .....	18	5	35	Physiology .....	18	5	35				
		Algebra .....	72	5	35	U. S. History .....	16	5	35	English .....	108	5	35
B. S. ....	.....	Geometry .....	72	5	35	Civics .....	50	5	35	Physiology .....	12	5	35
B. S. ....	.....	Arithmetic .....	34	5	35	Physical Geog. ....	24	5	35	Political Econ. ....	16	5	35
		General Hist. ....	86	5	35	Physics .....	24	5	35				
Ph. B. ....	.....	Algebra .....	54	5	35	Civics .....	15	5	35	Physiology .....	18	5	35
Ph. B. ....	.....	Geometry .....	72	5	35	Physical Geog. ....	18	5	35	Political Econ. ....	18	5	35
B. A. ....	.....	Arithmetic .....	18	5	35	Physics .....	36	3	35	Botany .....	18	3	35
		General Hist. ....	86	5	35	English .....	128	21	75	Latin .....	144	5	35
		U. S. History .....	18	5	35								
		Algebra .....	48	5	35	Civics .....	12	5	30	Political Econ. ....	12	5	30
		Geometry .....	36	5	30	Physical Geog. ....	24	5	35	Botany .....	24	5	30
		Arithmetic .....	36	5	30	Physics .....	36	4	40	Music .....	144	1	30
		General Hist. ....	86	5	30	English .....	108			Penmanship .....	36	4	15
		U. S. History .....	24	5	35	Physiology .....	10	5	30	Latin .....	72	5	35
B. Di. ....	7½	Algebra .....	62	5	30	Physical Geog. ....	30	5	30	Book-keeping .....	18	5	45
M. Di. ....	2	Geometry .....	36	5	30	Physics .....	36	5	30	Word Analysis .....	18	5	30
B. Di. ....	1	Arithmetic .....	36	5	30	English .....	108	5	30	Didactics .....	36	5	30
		General Hist. ....	86	5	30	Physiology .....	15	5	30				
		U. S. History .....	54	5	30	Political Econ. ....	15	5	30	Latin .....	108	5	30
		Civics .....	34	5	30	Adv. Arith. ....	36	5	30				
B. S. ....	.....	Algebra .....	36	5	35	U. S. History .....	36	5	35	English .....	144	5	35
		Geometry .....	48	5	35	Civics of Iowa .....	16	5	35	Physiology .....	18	5	35
		Arithmetic .....	84	5	35	Physical Geog. ....	56	5	35	Political Econ. ....	18	5	45
		General Hist. ....	72	5	35	Physics .....	33	5	35				
A. M. ....	.....	Algebra .....	57	5	35	Physical Geog. ....	38	5	35	Botany .....	19	5	35
Ph. B. ....	.....	Geometry .....	67	5	35	Physics .....	38	5	35				
Ph. B. ....	.....	Arithmetic .....	38	5	35	English .....	152	5	35	Latin .....	152	5	35
B. S. M. S. ....	.....	General Hist. ....	86	5	35	Physiology .....	19	5	35				
A. S. ....	.....	U. S. Hist. ....	19	5	35	Political Econ. ....	19	5	35	German .....	152	5	35
B. D. ....	.....	Civics .....	19	5	35	Chemistry .....	19	5	35				
A. M. ....	.....	Algebra .....	54	5	40	Physics .....	36	5	40				
Ph. D. ....	.....	Geometry .....	54	5	40	English .....	152	5	40	Latin .....	72	5	40
		Arithmetic .....	18	5	30	Physiology .....	18	5	40				
		General Hist. ....	36	5	40	Political Econ. ....	18	5	40	German .....	72	5	40
		U. S. Hist. ....	18	5	40	Botany .....	36	5	40				
		Civics .....	18	5	40	Word Analysis .....	36	5	40				
		Physical Geog. ....	18	5	40	Latin Beginning .....	36	5	40				
B. S. ....	.....	Algebra .....	54	5	45	Civics .....	18	5	35	Political Econ. ....	18	5	35
B. S. ....	.....	Geometry .....	54	5	45	Physical Geog. ....	18	5	35	Botany .....	18	5	35
		Arithmetic .....	18	5	45	Physics .....	36	5	35	Latin .....	144	5	45
		General Hist. ....	86	5	30	English .....	108	5	35				
A. M. ....	.....	Algebra .....	54	5	40	Physical Geog. ....	18	5	40	Com'l Arith. ....	18	5	40
A. S. ....	.....	Geometry .....	54	5	40	Physics .....	36	5	40	Bookkeeping .....	18	5	40
B. S. ....	.....	Arithmetic .....	18	5	40	English .....	108	5	40	German .....	72	5	40
B. S. ....	.....	General Hist. ....	86	5	40					Geology .....	18	5	40
	½	U. S. Hist. ....	18	5	40	Botany .....	18	5	40	Political Econ. ....	18	5	40
		Civics .....	18	5	40								

## HIGH SCHOOL STATISTICS

High school	Name of instructors.	Number of period	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high-school grade.
Manilla...	J. O. Rhoter.....	5	Palmer Col. 6.....		
			Union Ch. Col. 1.....	I. S. N. S. 1.....	
	Fannie Potter.....	5	Upper Ia. Univ. 5.....		
	Mayme Hard.....	5	Upper Ia. Univ. 7.....		
Manning..	O. J. Johnson.....	8			Valparaiso 6.....
	Mattie W. Morrison.....	6	Tabor 4.....		Tabor Academy 1.....
	Raymond B. Leland.....	7		I. S. N. S. 5.....	
	Henry Sievers.....	7	Rendsberg (Ger.) 2.....		
Mapleton.	G. L. Weaver.....	8			Valparaiso 3.....
	Mary E. Rice.....	6	Iowa Col. 4.....		U. of Chi. 1.....
	Colette Leathers.....	6	S. U. I. 2.....		
Maquoketa...	Mildred Clark.....	5			Lake Erie Col. 2.....
					Oberlin Col. 2.....
	Eva M. Byerly.....	6	U. of Mich. 8.....	I. S. N. S. 2.....	
	Ethel M. Wilson.....	6	Oberlin Col. 4.....		
Marathon.	Grace M. Behr.....	6	Oberlin Col. 4.....	Kan. State Nor. 1.....	U. of Chi. 1.....
	E. J. Feuling.....	4		I. S. N. S. 2.....	U. of Chi. 1 term.....
	Kate L. Morse.....	3		I. S. N. S. 2.....	
	Lura Hawk.....	4		I. S. N. S. 2.....	
Marcus....	R. A. Fenton.....			I. S. N. S. 2.....	
	Mabel Payton.....			I. S. N. S. 2.....	
	Hellen Wittick.....				Detroit School of Music.....
Marango..	O. H. Carson.....	2	Oberlin Col. 4.....		
	Mary D. Hall.....	6	ake 4.....		
	Cornelia Hermann.....	6	S. U. I. 8-8.....		
	Elizabeth Willard.....	5	Oberlin Col. 4.....		
Marion....	E. A. Stephenson.....	2	Oberlin Col. 4.....		
	Evangeline Jenkins.....	6	Western Reserve Woman's Col. 3.....		Carlton Col. 2.....
	Lulu B. Secrist.....	6	Oce Col. 4.....		
	Anna Singer.....	5		I. S. N. S. 4.....	
	Gilbert D. Deers.....	5	Franklin Col. 4 (Ind.).....		U. of Chicago 1/2.....
					Lenox Col. 80.....
	L. R. Marshall.....	3	Oxford Col. 1 (O.).....		of Chicago 1/2.....
	Alice E. Duffy.....	4	U. of Chicago 1.....		Berkley Univ. 1/2.....
					H. P. Nor. 1/2.....

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yr's experience in H. S.	High School Courses.											
			Branches studied.			Branches studied.			Branches studied.			Branches studied.		
			Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
M. Di., A. B.....	12	8	Algebra.....	46	5 35	Physiology.....	18	5 30	Cicero.....	16	5 30	16	5 30	
Ph. B.....		12	Geometry.....	38	5 30	Political Econ. ....	16	5 30	Virgil.....	20	5 30	20	5 30	
Ph. B.....			Arithmetic.....	38	5 30	Botany.....	20	5 30						
			General Hist.....	38	5 40	Psychology.....	16	5 30	Com'l Law.....	12	5 30			
			U. S. Hist.....	10	5 30	Zoology.....	18	5 30	Bookkeeping.....	20	5 30			
			Civics.....	16	5 30	Orthography.....	20	5 30	Com'l Geog.....	16	5 30			
			Physical Geog.....	16	5 30				U. S. Hist. Adv.....	12	5 30			
			Physics.....	36	5 35	Latin Beginning.....	36	5 30	Arith. Adv.....	16	5 30			
			English.....	144	5 30	Cæsar.....	36	5 30						
B. S.....	18		Algebra.....	54	5 40	Physical Geog.....	20	5 40						
A. B.....	1		Geometry.....	54	5 40	Physics.....	36	5 40	Latin.....	108	5 40			
M. Di.....			Arithmetic.....	36	5 40	English.....	144	5 40						
A. B.....	14		General Hist.....	36	5 40	Physiology.....	16	5 40	German.....	108	5 40			
			U. S. History.....	16	5 40	Political Econ.....	20	5 40						
			Civics.....	40	5 40	Botany.....	20	5 40						
B. S.....	15		Algebra.....	54	5 45	Physical Geog.....	18	5 45						
B. S.....	2		Geometry.....	54	5 45	Physics.....	36	5 45	Latin.....	72	5 45			
			Arithmetic.....	6	5 45	English.....	144	5 40						
			General Hist.....	54	5 45	Political Econ.....	18	5 45	Physiology.....	18	5 45			
			U. S. History.....	12	5 45	Botany.....	18	5 45	Book-keeping.....	18	5 45			
			Civics.....	18	5 45	Latin.....	72	5 45	Zoology.....	18	5 45			
			Algebra.....	54	5 4	U. S. History.....	18	5 40	English.....	54	5 40			
			Geometry.....	54	5 40	Civics.....	36	5 40	Physiology.....	18	5 40			
A. B., B. Di.....	6		Arithmetic.....	18	5 40	Physical Geog.....	18	5 40	Political Econ.....	18	5 40			
A. B.....	4		General Hist.....	54	5 40	Physics.....	36	5 40						
A. B.....	8													
B. Di., M. Di.....	2		Algebra.....	54	5 40	Physical Geog.....	18	5 40	Eng. History.....	18	5 40			
B. Di.....			Geometry.....	54	5 40	Physics.....	36	5 40	Lit. Reading.....	26	5 40			
B. Di.....			Arithmetic.....	45	5 40	English.....	185	5 40	Bookkeeping and					
			General Hist.....	36	5 40	Physiology.....	18	5 40	Penmanship.....	18	5 40			
			U. S. History.....	18	5 40	Political Econ.....	18	5 40	Latin.....	72	5 40			
			Civics.....	18	5 40	Gram. Review.....	8	5 40						
B. Di.....			Algebra.....	72	5 35	Civics.....	26	5 35	Political Econ.....	20	5 30			
B. Di.....			Geometry.....	32	5 35	Physical Geog.....	28	5 35	Botany.....	30	5 30			
			Arithmetic.....	32	5 35	Physics.....	36	5 35	Book-keeping.....	20	5 30			
			General Hist.....	36	5 35	English.....	152	5 30	Latin.....	72	5 35			
			U. S. History.....	52	5 35	Physiology.....	36	5 40						
A. B., A. M.....	21		Algebra.....	57	5 40				Latin.....	152	5 40			
B. Ph.....	4		Geometry.....	57	5 40	Physical Geog.....	19	5 40						
B. Ph.....	2		Arithmetic.....	19	5 40	Physics.....	38	5 40	German.....	76	5 40			
A. B.....	2		General Hist.....	57	5 40	English.....	150	5 40	Chemistry.....	32	5 40			
A. B., A. M.....			U. S. History.....	19	5 40	Physiology.....	19	5 40	Botany.....	19	5 40			
			Civics.....	14	5 40	Political Econ.....	19	5 40	Book-keeping.....	19	5 40			
Ph. B.....			Algebra.....	54	5 40	Arith. or Botany.....	18	5 40	Botany.....	18	5 40			
B. A.....	2		Eng. History.....	18	5 40	Literature.....	32	5 40	Zool. or Phys.					
B. Di., M. Di.....	8		U. S. History.....	36	5 40	Ancient Hist.....	36	5 40	Geog.....	18	5 40			
			Physics.....	36	5 40				Plane Geom or					
Ph. B.....	8		English.....	108	5 40	Book-keeping.....	36	5 40	German.....	36	5 40			
						Eng. Composition.....	36	5 40	Reviews.....	36	5 40			
			Latin.....	144	5 40	Physiology.....	18	5 40	Geom. Solid or					
			German.....	72	5 40	Civics.....	18	5 40	Didactics.....	18	5 40			
			Geometry.....	16	5 40	Arithmetic.....	36	5 40						

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in state Normal.	Years in other institutions above high school grade.
Marshall-town.....	E. V. Brumbaugh.....	1	Midland Col. 3 Baker Univ 1.....		Wabash Col. ½ U. of Chicago....
	Katharyn Morgan .....	4	Nebr. State U. 2		
	Fannie A. Quaise.....	5	Upper Ia. U. 3...	I. S. N. S. (Sum Sc)	S. U. I. (Sum Sch)
	Igerna Mirian Getz .....	5	Downer Col. 3. (Milwaukee) .....		Miss Baldwin's Sc. Bryn Mawr 1.....
	Naomi Achenbach.....	5	S. U. I. 2 .....	I. S. N. S. 4.....	Minn. Seaside Sta 6 weeks.....
	Julia R. Radmore.....	5	S. U. I. 4.....		
	Harriet Schuider.....	5		Ohio State N. 2.	
	Edna Stone.....	5		I. S. N. S. 3	U. of Neb. (Sum)
	Esse V. Hathaway.....	5	U. of Chicago 2.		Chaut. N Y (Sum)
	Carl Kent.....	5	S. U. I. 6.....		U. of Chicago 1...
	A. G. Karge.....				
	Rachel Currey.....	5	Northwestern U. 2 Wellesley Col. 2.		
Mason City	Eather L. Bissell.....	3	Cornell Col. 3½ ..		Cornell Acad. 1½ U. of C. 2 quarters
	Mayme McMahon.....	5	U. of Wis.....		
	John M. Dunkerton.....	3		I. S. N. S. 4.....	
	Winworth Williams.....	5	Drake 4.....		
	Jesse W. Warner.....	5	U. of Wis 3.....		
	Amy Dorothy Dunkis.....	5	S. U. I. 4.....		
	Mary Louise Quinn.....	5	R. I. State Col. 5.		
	Anna Waldo Stanbery.....	5	Cornell Col. 4.....		
	Mae Telford.....	5	U. of Wis. 4.....		
	Len Richards.....	5	Iowa Col. 4.....		
	Eleanor McLaughlin.....	5	S. U. I. 3.....		
Mediapolis	J. C. McGlade.....	6	Parsons Col. 5.....	I. S. N. S. ½.....	
	Mary L. Jamison.....	6	Parsons Col. and U of Nebr. 5.....		
	Grace M. Holmes.....		S. U. I. 4.....		
Milo.....	A. N. Smith.....	4	Drake 2 sum. trms .....		Highland Park C. 1½ Fairfield A.
Milton....	Frank Jarvis.....	6	Western Col. 3.....	N. Indiana Nor. 1	Drake, H. P. Col. and Dixon, Ill. 1 term each.
	Zaldee Griffith.....	6	Ames 4.....		
	Kate Wise.....	6			Southern Ia. Nor.
Missouri Valley.	J. H. Beveridge.....				
	S. M. Wallace.....	6	Lenox Col. 4.....		
	Cresnor Lister.....	6	Ottawa Uni. 4.....		
	Minnie Petrashek.....	6	U. of Nebraska 4.		
	Flora M. Koch.....	6	U. of Minnesota 4		
	Chas. E. Tredway.....	6		Kansas State N. 3	

## —FOUR YEAR COURSES.

Preparation.		Yr's experience in H. S.	High School Courses.											
Degrees held.			Branches studied.			Number weeks.	Rec. per week.	Rec. period.	Branches studied.			Number weeks.	Rec. per week.	Rec. period.
			Algebra .....	54	5	42	Political Econ...	18	4	42	Trigonometry..	18	4	45
			Geometry .....	54	5	42	Electives—				Com. Geog .....	18	4	45
B. A., M. A. ....	7	1	Arithmetic .....	18	5	45	Latin .....	144	4	45	Bus. Law .....	18	4	45
Ph. B. ....	6	1	U. S. History .....	36	4	45	German .....	72	4	45	Roman Hist. ....	18	4	45
			Civics .....	18	4	45	Chemistry .....	36	4	45	Greek Hist. ....	18	4	45
			English .....	144	4	45	Botany .....	36	4	45	Medieval Hist. ...	18	4	45
			Physiology .....	18	4	45	Zoology .....	36	4	45	Eng. Hist. ....	18	4	45
B. A. ....	2													
Ph. B. ....	4													
B. A. ....	5													
B. Di. ....	1													
B. S., M. S. ....	3													
A. B. ....	1													
B. S. ....	1		Algebra .....	72	5	45	Gen. History .....	72	5	45	Zoology .....	18	4	45
A. B. ....	4		Geometry .....	36	5	45	Eng. Composition				Botany .....	18	5	45
M. O. ....	2		Physics .....	36	4	45	Rhetoric & Class.	36	5	45	Eng. Hist. ....	18	4	45
A. B. ....	2		English .....	126	5	45	N. S. History .....	18	5	45	German .....	72	4	45
			Electives—				Civics N. S. ....	18	5	45	Mn'l Training .....	144	4	45
B. Ph. ....	2		Latin .....	144	5	45	Phys. Geog. ....	18	5	45	(3 electives re-			
B. S. ....	2		Geom.—Solid .....	18	5	45	Physiology .....	18	5	45	quired each sem-			
Ph. B. ....	2		Arithmetic .....	18	2	45	Polit. Econ .....	18	5	45	ester.)			
B. A. ....	2													
Ph. B. ....	6													
Ph. B. ....	12													
Ph. B. ....	2		Algebra .....	45	4	42	Physical Geog. ....	18	5	45	Latin .....	144	4	45
B. S. ....	9		Geometry .....	45	5	45	Physics .....	36	5	45	Botany .....	18	4	45
Ph. B. ....	9		Arithmetic .....	18	5	40	Eng. Grammar .....	108	5	40	Book-keeping .....	18	5	40
			Gen. History .....	36	4	40	English .....	108	5	40	Botany .....	18	4	45
			U. S. History .....	18	3	35	Physiology .....	18	5	40	Book-keeping .....	18	5	40
			Civics .....	18	4	40	Political Econ .....	18	5	40				
			Algebra .....	60	5	30	Civics .....	18	5	30	Botany .....	18	5	30
			Geometry .....	36	5	30	Physical Geog. ....	18	5	30	Book-keeping .....	18	5	30
			Arithmetic .....	45	5	30	Physics .....	36	5	30	Orthography .....	18	5	30
			Gen. History .....	36	5	30	English .....	108	5	30	Electution .....	12	6	30
			U. S. History .....	36	5	30	Physiology .....	18	5	30	Latin .....	72	5	30
			Algebra .....	64	5	40	Civics .....	24	5	40	Political Econ .....	24	5	40
			Geometry .....	32	5	35	Physical Geog. ....	18	5	40	Psychology .....	16	5	35
B. S. ....	16		Arithmetic .....	16	5	40	Physics .....	32	5	40	Latin .....	64	5	40
			Gen. History .....	48	5	40	English .....	160	5	40				
			U. S. History .....	24	5	35	Physiology .....	16	5	35				
			Algebra .....	54	5	45	English .....	108	5	45	Electives—			
A. B. ....	4		Geometry .....	96	5	45	Botany .....	18	5	30	Hist. of A. Lit. ..	18	5	45
Ph. B. ....	8		Arithmetic .....	12	5	40	English History .....	18	5	45	Hist. of E. Lit. ..	18	5	45
Ph. B. ....	8		U. S. History .....	18	5	40	Ancient History .....	18	5	45	Manual Train. ....	72	1	45
A. B. ....	8		Civics .....	18	5	40	German .....	72	5	45	Chemistry .....	18	5	30
			Physical Geog. ....	18	5	45	Latin .....	72	5	45	Latin .....	72	5	45
			Physics .....	18	5	30								

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Mitchellville..	Ernest Coad.....	8	Burlington Col. 4.....		Highland Park 1 U. of Chi. 1qr..
	Nell Rae.....	6	Drake 4. ....	I. S. N. S. 1.....	
Monona...	R. H. Sylvester.....	6		I. S. N. S. 3.....	
	M. Winifred Schmid.....	7	Upper Ia. U. 4.....		
	Florence Butler (Has classes in gram. room also)...	2		I. S. N. S. 2.....	
Montezuma..	O. E. Douglass, Supt.....	4	Central U. of Ia. 4.....		U. of Chi. 2. ....
	M. O. Roark, Prin.....	7	Indiana Uni. 2.....		Cent. Nor. Col. 4 Danville, Ind..
	Ida J. McKee.....	6		I. S. N. S. 1.....	U. of Wis 8.....
Monticello	Mary Raymond.....	6	Iowa Col. 4.....		
	John E. Foster.....	6			
	Mary I. Jarman.....	6		I. S. N. S. 1.....	
	Nancy G. Carroll.....	6	S. U. I. 4.....		S. U. I. 3.....
	Mildred I. Bates.....	6		I. S. N. S. 2.....	
Montour..	Julius H. Rhode.....	12	Cornell Col. 1.....	I. S. N. S., sum. T. ....	
	Mrs. L. Mae Banks.....		Ia. State Col. 4.....		
Morning-Sun.	L. T. Hill Supt.....	5	Haverford Col. 4.....		
	Katharine Paine.....	6	S. U. I. 4.....		
	Nora A. Cosette (Music)...	4	Monmouth Col. 8.....		
	Elizabeth Roe.....	6	Ill. Wesleyan U. 2.....		
Mt. Ayr...	Ad m. Pickett.....	5	Ill. Wesleyan 4.....		Highland Park 1½ Greer Col. ¼.....
	Lulu Mills.....	7	S. U. I. 4.....	I. S. N. S. ¾.....	
	Eva Stahl.....	7	Simpson Col. 4.....		
	Fa. Remick.....	1	Simpson Col. 1.....		
			Drake 1.....		
Mt. Pleasant.	S. Francis.....	3	S. U. I.....	I. S. N. S.....	
	Lida A. Pittman.....	4	I. W. U. 2½.....		
	Allena Mittenberg.....	6	O. S. U.....		
	Mrs. Frank T. Stevens.....	4	Lawrence Univ. ....		Cook Co. Nor. Chi. Battle Creek Col. Michigan.....
	Harry Weber.....	6	S. U. I.....		
Mt. Vernon.	L. T. Newton.....	6	Ohio Wes. Univ. 4.....	Albany N. Y. ....	
	M. Lillian Smedley.....	6	Cornell Col. 4.....	St. Nor. Col 1.....	
	Jeannette Sniffen.....	6	Cornell Col. 4.....		

**—FOUR YEAR COURSES.**

[illegible]

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Moulton.	G. W. Bryan .....	4	Oskaloosa Col. 2.		Moulton Nor. 2...
	Lula E. Bryan .....	6	Drake 4.		
	Lillian Cunningham .....	6	Univ. of Neb. 3.		Central Univ. 1
	Edna Wilson .....			State Nor. Kirksville Mo. 4	U. of Chi. 1 term.
Murray..	G. E. Wright .....	8	Univ. of Ill. 8.		Danville, Ind. 1..
	Ora Crisswell .....	8	Simpson Col. 3		Austin Col. 4.
Muscatine	R. M. Arey .....	4	S. U. I. 2.	I. S. N. S. 4.	
	Katherine Mauthe .....	6	S. U. I. 4.		
	Esthel Jaynes .....	6	Univ. of Chi. 4.		
	Mabel V. Hoffman .....	6	S. U. I. 5.		
	Eleanor Lowden .....	5	Iowa Col. 5. Radcliffe Col. 1.		Stuttgart Acad. 8
	Helen V. E. Chase .....	6	Vassar Col. 2.		U. of Chi. 2½.
	Jessie P. Hastings .....	6	S. U. I. 8.		
	Sadie Beardslee .....	6	N. W. Univ. 8.		
Mystic .....	Mary E. White .....	6	Univ. of Mich. 2.		
	John C. DeMar .....	4	Drake 2.		So. Iowa Nor. 3.
	Mary Llewelyn .....	7			
	Lillian Hughes .....	3	Edinburg Ladies College 5.		
McGregor.	Benish Dimmist .....	5	U. of Chic. 2½.	I. S. N. S. 3.	
	Ellen F. Roe .....	5	Carleton Col. 4		U. of Minn. 1.
	J. H. Dahm .....	6	Col. in Belgium 4.		Cornell Col. 1 term
Nashua..	E. C. Hill .....	4	S. U. I. 4.	I. S. N. S. 3.	Hedrick Nor. 1..
	Mildred Hersaline .....	6	S. U. I. 4.		
	Florence Chaffee .....	6		A. N. Y. State Nor. 3	
	Kate A. Miller .....	5	Iowa Col. 4.		
Neola .....	M. R. Hassel .....			I. S. N. S. 3	
	Carrie S. Taylor .....		Drake 3 Wis. State U. 2.		
	Lillie M. Walters .....		S. U. I. 2. N. W. Univ. 2.		
New Hampton.	C. L. Woodfield .....	2	De Paw Univ. 5		U. of Chicago ½.
			Perdue Univ. 1		Decorah Acad. 1.
	Marthine Gabrielsen .....	6	U. of Wis. ½.	I. S. N. S. 1½.	U. of Chicago 1.
	Helen Chambers .....	6	Cornell Col. 4		Or. Valley 3. 4..
	Helen Hitchcock .....	6	U. of Chicago 4.	I. S. N. S. ½.	
New Sharon..	Mary White .....	6	Drake 1 Simpson Col. 4.		
	P. M. Hersom .....	4			H. Pk. Col. 3.
	Bess Bosquet .....	6	Iowa Col. 3.		Central Uni. 4.
	Mrs. Allie Sheesley .....	4			

## -FOUR YEAR COURSES.

Preparation.	Yr's experience in H.S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
		Algebra .....	72	5	35	Physical Geog. ....	18	5	31				
		Geometry .....	72	5	35	Physics .....	86	5	35	Book-keeping ..	86	5	35
		Arithmetic .....	24	5	35	English .....	108	5	35	Chemistry .....	36	5	35
		General Hist. ....	86	5	35	Political Econ. ....	18	5	31	Plant Life .....	86	5	35
		U. S. History .....	12	5	35								
		Civics .....	28	5	35	Latin .....	144	5	35				
M. S. ....	5	Algebra .....	54	5	30	Civics .....	18	5	30	Orthography & Spelling .....	144		
		Geometry .....	54	5	40	Physical Geog. ....	86	5	30	Penmanship .....	144		
		Arithmetic .....	28	5	40	Physics .....	33	5	40	Music .....	144		
		General Hist. ....	36	5	30	English .....	108	5	33				
		U. S. History .....	18	5	30	Political Econ. ....	18	5	30				
B. S., B. Di. ....	8	Algebra .....	57	5	40	Botany .....	38	5	40	Trigonometry or	18	5	40
B. S. ....	5	Geom.-plane .....	38	5	40	Physical Geog. ....	19	5	40	Arithmetic or ..	19	5	40
A. B. ....	2	Physics .....	38	5	30	Electives .....	38	5	40	Zoology .....	19	5	40
A. B., A. M. ....	1	English .....	152	5	40	Chemistry .....	38	5	30	German .....	152	5	40
Ph. B. ....	1	Hist. of Greece ..	19	5	40	Physiology .....	19	5	40	Remainder of course identical with Lat course			
Ph. B. ....	3	Hist. of Rome .....	19	5	40	Political Econ. ....	19	5	40	Com'l Course ..	298	5	40
Ph. B. ....	6	Hist. of Eng. ....	19	5	40	Geom. Solid or ..	19	5	40				
A. B. ....	4	Latin .....	152	5	40	Amer. Hist. or ..	19	5	40				
	14												
B. D., B. Pe. ....	8	Algebra .....	54	5	35	U. S. History .....	18	5	40	English .....	106	5	40
	4	Geometry .....	86	5	40	Civics of U. S. ....	86	5	35	Physiology .....	86	5	40
		Arithmetic .....	18	5	40	Physical Geog. ....	26	5	35	Political Econ. ....	18	5	40
		General Hist. ....	36	5	35	Physics .....	86	5	35	Latin .....	86	5	40
B. Di. ....	6	Algebra .....	5	5	35	Physics .....	88	5		Botany or .....	10	5	40
		Geometry .....	88	5	14	English .....	82	5		Com'l. Arith. ....	10	5	40
A. B. ....	3	Arithmetic .....	19	5	20								
A. B., A. M. ....	20	Civics .....	16	5	20	Latin .....	152	5	20	German .....	88	5	48
		Physical Geog. ....	19	5		General Hist. ....	88	5	20				
Ph. B., M. Di. ....	5	Algebra .....	54	5	40					Physical Cult. ....	86	5	40
Ph. B. ....	3	Geometry .....	86	5	40	Latin .....	144	5	40	Gen'l History ..	86	5	40
	1	Physical Geog. ....	36	5	40					German .....	72	5	40
		Physics .....	36	5	40	Electution .....	33	5	40	Eng. History ..	18	5	40
		English .....	126	5	40	Music .....	18	5	40	Civics .....	18	5	40
		Physiology .....	18	5	40	Com'l Arith. ....	18	5	40	Political Econ. ....	18	5	40
		Botany .....	18	5	40	Book-keeping .....	18	5	40	Geom. (Solid) ..	18	5	40
B. Di. ....		Algebra .....	54	5	35	Civics .....	18	5	35	Botany .....	18	5	35
		Geometry .....	54	5	35	Physical Geog. ....	18	5	35				
B. Di. ....		Arithmetic .....	36	5	35	Physics .....	86	5	35	Latin .....	108	5	35
		General Hist. ....	54	5	35	English .....	108	5	35				
A. B. ....		U. S. Hist. ....	36	5	35	Physiology .....	18	5	35	German .....	108	5	35
		Algebra .....	54	5	40	Physical Geog. ....	18	5	40				
A. B. ....	7	Geometry .....	54	5	40	Physics .....	36	5	40	Latin .....	108	5	40
		Arithmetic .....	18	5	40	English .....	162	5	40				
		Gen'l History .....	36	5	40	Political Econ. ....	18	5	40	German .....	72	5	40
A. B., A. M. ....	4	U. S. History .....	18	5	40	Botany .....	18	5	40	Zoology .....	18	5	40
A. B. ....	3	Civics .....	18	5	40	Begin Latin .....	36	5	40				
	1												
M. Di. ....	10	Algebra .....	54	5	45	Civics .....	18	5	45	Botany .....	16	5	45
		Geometry .....	88	5	45	Physical Geog. ....	18	5	45	Zoology .....	18	5	45
Ph. B. ....		Arithmetic .....	18	5	45	English .....	44	5	45	Latin .....	144	5	45
		Gen'l Hist. ....	36	5	45	Physiology .....	18	5	45				
		U. S. Hist. ....	18	5	45	Political Econ. ....	18	5	45				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number rec. periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Newell....	J. E. Candy.....	5	.....	I. S. N. S. 2½...	.....
	Dora Carter.....	7	Upper Ia. Uni. 2..	.....	.....
Newton..	E. J. H. Beard.....	2	Hamilton, Col., 4	.....	.....
	.....	.....	N. Y. ....	.....	.....
	Minnie B. King.....	7	Helmeeth Col. 4;	.....	.....
	.....	.....	Canada. ....	.....	.....
	L. Vesta Beard.....	7	.....	.....	.....
Nevada..	Lucy E. Hall.....	7	Drake 4..	.....	.....
	Maria O. Brace.....	7	Iowa College 4 ..	.....	.....
	.....	.....	.....	.....	.....
Nevada..	Anna O. Batman..	6	S. U. I. 1 term....	I. S. N. S. 1 term.	Correa. Work.
	A. F. Probst.....	4	U. of Mich. 2 ..	.....	U. of Chicago ..
	Jennie J. Gustafson ..	7	.....	I. S. N. S. 2 ..	M. S. N. Col. 2½
	Nellie C. Kinney ..	7	Drake 2. ....	I. S. N. S. 1 ..	Valparaiso Col. 1..
Nora Springs.	.....	.....	.....	.....	B. H. Col. ¼. ....
	.....	.....	.....	.....	Cor. Course.
	.....	.....	.....	.....	H. P. Nor.
	.....	.....	.....	.....	Ferry Hall Sem. 1
	.....	.....	.....	.....	U. of U 1 term..
	.....	.....	.....	.....	Cor. Work in
	.....	.....	.....	.....	English. ....
	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....
Nora Springs.	Edw. H. Balm .....	4	Central Western,	.....	.....
	.....	.....	Warrenton, Mo. 1	.....	.....
	Chas. E. Cove .....	4	Upper Iowa 4. ....	.....	.....
	J. H. Underwood ..	7	Beloit, College 1;	.....	.....
	.....	.....	Western Col. 1½;	.....	.....
Nora Springs.	.....	.....	S. U. I. 2. ....	.....	.....
	Lottie E. Temple.....	7	.....	.....	.....
	S. Ross Buchanan ..	6	Nora Springs 2....	.....	.....
	Addie Oatstron ..	5	Upper Ia. Uni. 1..	.....	.....
	.....	.....	Nora Springs. 2..	.....	.....
Nora Springs.	Faith Slocum.....	.....	Iowa. Col. Con. 3	.....	.....
	Alberta Alida .....	.....	Memorial Uni. 2	.....	.....
	.....	.....	Nora Springs 2..	.....	.....
North English.	Frank W. Shultis....	5	Iowa State Col. ¼	I. S. N. S. 1 ..	.....
	J. W. Pierce .....	4	.....	I. S. N. S. ¼ ..	H. P. C. 2. ....
	Nettie Shultis.....	2	.....	.....	H. P. C. 1 .....
Northwood....	Horton A. Dwelle ..	4	Cornell Col. 2 ..	.....	.....
	W. H. Hegemann ..	6	U. of Chi. 2. ....	.....	.....
	Margaret Scammon ..	7	Iowa Col. 4 .....	.....	.....
Oak Park	.....	.....	.....	.....	.....
	H. W. Mayne.....	3	Uni. of Minn. 2..	.....	N Ind. Nor. Col. ?
	Glenn Clark.....	6	Iowa Col. 4. ....	.....	Iowa Col. Acad. 1
	Mabel E. Hutton.....	6	Drake 2 .....	.....	.....
Oak Park	.....	.....	.....	.....	.....
	Iris B. Robinson.....	.....	Drake 2.....	.....	.....

—FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Y's experience in H.S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
		Algebra .....	54	5	36	Civics .....	36	5	36	Political Econ.	18	5	36
		Geometry .....	54	5	36	Physical Geog. .	36	5	36	Botany .....	18	5	36
	1	Arithmetic .....	51	5	36	Physics .....	36	5	36	Latin .....	72	5	36
		Genl Hist. ....	32	5	36	English .....	144	5	36				
		U. S. Hist. ....	34	5	36	Physiology .....	18	5	36				
A. B.	36	Algebra .....	54	5	36	Physiology .....	18	5	36	German .....	72	5	36
		Geometry .....	54	5	36					Reviews .....	3	5	36
A. B.	21	Arithmetic .....	18	5	36	Latin .....	144	5	36				
		General Hist. ....	36	5	36	Botany .....	36	5	36	Electives —			
	17	U. S. History ..	18	5	36	Reviews .....	36	5	36	Physical Geog.	18	5	36
A. B., Ph. B.	6	Civics .....	18	5	36					Political Econ.	18	5	36
Ph. B.	3	Physics .....	36	5	36	Book-Keeping ..	18	5	36				
		English .....	126	5	36	Chemistry .....	36	5	36				
		Algebra .....	54	5	36	Physics .....	36	5	36	English .....	36	5	36
		Geometry .....	54	5	36	Eng. Grammar }	36	5	36	Political Econ.	16	5	36
		Arithmetic .....	30	5	36	Eng. Comp ... }	36	5	36	Botany .....	20	5	36
		Gen. History ..	36	5	36	Eng. Comp ... }	36	5	36	Eng. History ..	16	5	36
		Civics .....	18	5	36	Rhetoric .....	28	5	36	Latin .....	144	5	36
		Physical Geog.	20	5	36	American Lit...	20	5	36				
	5½												
		Algebra .....	54	5	36	Word Study .....	18	5	36	U. S. History ..	18	5	36
		Geometry .....	54	5	36	Electives .....	72	5	36	Physiology .....	18	5	36
Ph. B.	8	Gen. History ..	36	5	36					Botany .....	18	5	36
A. B.	2	Civics .....	18	5	36	Com'l Geog .....	18	5	36	Eng. History ..	18	5	36
		Physical Geog.	18	5	36	Eng. History .....	18	5	36	German .....	72	5	36
		Physics .....	36	5	36	Botany .....	18	5	36	Latin .....	72	5	36
B. A., M. A.		English .....	126	5	36	Electives .....	108	5	36	Book-keeping ..	18	5	36
	4	Political Econ.	18	5	36					Com'l Geog .....	18	5	36
		Latin .....	144	5	36	Electives—							
	4					Chemistry .....	36	5	36				
		Algebra .....	54	5	36	Civics .....	18	5	36	Political Econ.	18	5	36
M. Di.	10	Geometry .....	54	5	36	Physical Geog.	18	5	36	Botany .....	18	5	36
B. Di.	6	Arithmetic .....	36	5	36	Physics .....	36	5	36	Book-keeping ..	18	5	36
	2	Gen. History ..	36	5	36	English .....	144	5	36	Drawing .....	18	5	36
		U. S. History ..	36	5	36	Physiology .....	18	5	36	Latin .....	72	5	36
		Algebra .....	54	5	36	Physical Geog.	18	5	36				
	14	Geometry .....	51	5	36	Physics .....	36	5	36	Latin .....	14	5	36
	7	Gen. History }	51	5	36	English .....	144	5	36				
A. B.	3	Eng. History }	51	5	36	Botany .....	18	5	36	German .....	36	5	36
		Amer. History }	18	5	36	Book-keeping ..	18	5	36	Economics ..	18	5	36
		Civics .....	18	5	36	Writing .....	144	3	15	Higher Arith...	18	5	36
						Spelling .....	144	2	15				
B. A.	18	Algebra .....	54	5	36	Greek & Ro Hist	18	5	36	Eng. History ..	18	5	36
Ph. D.		Geometry .....	51	5	36	Med. Mod Hist..	18	5	36	Book-keeping ..	18	5	36
	5	U. S. History ..	18	5	36					Astron. or Bot.	18	5	36
B. Ph.	4	Civics .....	18	5	36	Latin .....	41	5	36	Chem. or Phy.	18	5	36
		Physics .....	36	5	36	Eng. History ..	18	5	36				
		English .....	144	5	36	Astron. or Bot'y	18	5	36	Com. Course ..	13	5	36
		Physiology .....	18	5	36								
		Political Econ.	18	5	36	German .....	72	5	36				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Olebolt...	Lealie I. Reed.....	2	S. U. I. 2.....	I. S. N. S. 4....	Harvard Col. $\frac{1}{2}$ Western Nor. $\frac{1}{2}$ U. of Chi. $\frac{1}{2}$ ....
	Lavinia Mowry.....	5		I. S. N. S. 8....	
	Gertrude Inalls.....	5	Iowa Col. 4.....		Fremont Nebr. Nor. Sch. $\frac{1}{2}$ ....
	Wilhelmina Kramer.....	3		I. S. N. S. $\frac{1}{2}$ ....	
Oelwein...	L. B. Moffett.....	1	S. U. I. 2.....	I. S. N. S. 3.....	U. of Chi. 1-6.....
	Mae Oreswell.....	6		I. S. N. S. $2\frac{1}{2}$ ....	
	Perl Bemis.....	6	S. U. I. 4.....		
	Mae Dolan.....	6		I. S. N. S. 3.....	
	Gertrude Ayers.....	6		I. S. N. S. 1.....	
Olin.....	T. J. Cowan.....	4	Iowa State Col. 2.....		Western Nor. Col. 2 U of Chi $\frac{1}{2}$
	Erma Babcock.....	6	Mammoth Col. 4.....	I. S. N. S. 1.....	
Orange City..	Sidney Hoffman.....	3	U. of Chi. 2.....		Trl. State Nor. 2.....
	Joseph L. Johnson.....	6		I. S. N. S. 4.....	
	Alice M. Wilson.....	7	Iowa College 4.....	I. S. N. S. 1.....	
Osage.....	H. W. Jarne.....	5			Highland Park... Cedar V. Sem. 3.....
	Geo. H. Sawyer.....	2	U. of Chi. 4.....		
	Olara Rosa Wilson.....	6	S. U. I. $4\frac{1}{2}$ ....		
	Ethel E. McKinley.....	5	Ia. State Col. 2.....		Nora Spgs. Sem. 2 S. U. I. Sum. Ses.
			Cornell Col. 1.....		
	Elizabeth Fitz.....	6		I. S. N. S. 3.....	
Osceola...	W. R. Andrews.....	2	Amity Col. 1, Tarkio Col. 1, W. N. Col. 3.....		
	Eliza Mitchell.....	4			
	Enla McMaisters.....	4			
	Margaret Neal.....	6	Union Col. 4.....		
	Ethel Smythe.....	6	Parsons Col. 4.....		
Oskaloosa.	H. W. Hurt.....	4	I. W. U. & Ger. Col.		Grad. Work U. of Chi..
	Helen M. Handy.....	4	N. W. Univ. ....		
	Alfred Williams.....	6	Tarkio Col.....		Grad. Work U. of Chi..
	Ada M. Haskell.....	5	Penn Col. ....		U. of Chi. ....
	Mable Emerick.....	6	Penn Col. ....	I. S. N. S. ....	U. of Chi. ....
	Mary L. Dobyns.....	5	U. of Chi. ....		Visitation Acad..
	John E. Hirst.....	6	Orake.....	I. S. N. S. ....	N. Ill. Nor.....
	Jessie L. Duboc.....	7	Shurtleff Col. Penn Col..		Des Moines Col..
	Lily McCune.....	6	Penn Col. ....	I. S. N. S. ....	
	Maude Harbach.....	7	Penn Col. Bryn Mawr..		U. of Chi. ....
	Harry Goodrich.....	7	I. W. U. ....		
	Sara A. Williams.....	1			New Sch. Metho-d Des Moines Music College 2..

—FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied	Number weeks	Rec. per week	Rec. period	Branches studied.	Number weeks	Rec. per week	Rec. period	Branches studied.	Number weeks	Rec. per week	Rec. period.
Ph. B. M. Di.	4	Algebra	56	5	15	Physics	86	5	33	Latin	144	5	33
Ph. B.	6	Geometry	56	5	35	English	124	5	35	Word Analysis	18	5	35
	8	Arithmetic	16	5	35	Physiology	10	5	35	Book-keeping	20	5	40
	2	Gen. History	36	5	35	Political Econ.	20	5	35	Com. Geog.	20	5	35
		U. S. History	36	5	35	Botany	16	5	33	Mental Arith.	20	5	35
		Civics	40	5	35	Correspondence	16	5	35	Com. Law	16	5	35
		Physical Geog.	20	5	35								
Ph. P., M. Di.	16	Algebra	54	5	40					Com. Geog.	18	5	40
B. Di.	8	Geometry	54	5	40	Latin	144	5	40	Book-keeping	18	5	40
B. Ph.	3	Arithmetic	18	5	40	Electives	80	5	40	Electives—			
B. Di.	4	Gen. History	36	5	40					Physiology	18	5	40
B. Di.	3	U. S. History	36	5	40	German	72	5	40	Book-keeping	18	5	40
		Physics	36	5	40	Zoology	18	5	40	Zoology	18	5	40
		English	126	5	40	Physical Geog.	18	5	40	Physical Geog.	18	5	40
		Political Econ.	18	5	40	Physiology	18	5	40				
B. Sc.	10	Algebra	72	5	35	Gen. History	26	5	35	Physics	84	5	40
		Geometry	36	5	35	Civics	18	5	35	English	108	5	35
		Arithmetic	18	5	35	Physical Geog.	18	5	35	Latin	108	5	35
A. B.	8	Algebra	54	5	40	U. S. History	36	5	40	English History	36	5	40
B. Di.	2	Geometry	36	5	40	Political Econ.	36	5	40	Botany	14	5	40
Ph. B.	2	General Hist.	54	5	40	Science	34	5	40	Physiology	18	5	40
		Physics	36	5	40	Electives	108	5	40	Com'l. Geog.	18	5	40
		English	126	5	40					Geometry Solid	18	5	40
		Latin	36	5	40	Electives—				Arithmetic	18	5	40
						Physical Geog.	18	5	40	Book-keeping	18	5	40
		Latin	108	5	40	German	72	5	40	Zoology	18	5	40
		Electives	108	5	40	Civics	18	5	40				
						U. S. History	36	5	40				
Ph. B.	8	Algebra	54	5	35	Physiology	18	5	35	Electives—			
Ph. B.	10	Geometry	36	5	35					Botany	14	5	35
		General Hist.	36	5	35	Latin	144	5	33	Book-keeping	18	5	35
	1	U. S. History	18	5	35					Eng. History	14	5	35
		Civics	18	5	35	Arithmetic	18	5	35	German	72	5	35
B. S.		Physical Geog.	18	5	35	Word Anal. or	26	5	35				
B. Di.		Physics	36	5	35	Seg. Latin	36	5	35				
		English	126	5	35								
B. S., M. A.		Algebra	54	5	40	Physics	86	5	40	Com'l. Geog.	18	5	40
		Geometry	54	5	40	English	144	5	40	Geology	18	5	40
B. S., M. A.	8	Arithmetic	18	5	40	Physiology	18	5	40	Zoology	18	5	40
	10	General Hist.	36	5	40	Book-keeping	18	5	40	Botany	18	5	40
		U. S. History	18	5	40					Political Econ.	18	5	40
B. S.	2	Civics	18	5	40	Latin	144	5	40	Eng. history	18	5	40
B. A.	2	Physical Geog.	18	5	40								
B. S.		Algebra	54	5	40	Botany	18	5	40	Orthography	18	5	40
Ph. B., M. A.	6	Geometry	54	5	40	Musie	144	5	40	Reading	18	5	40
	2	Arithmetic	18	5	40					German	36	5	40
A. B.		General Hist.	36	5	40	Latin	126	5	40				
A. B.	3	U. S. History	18	5	40					Com'l. Course—			
A. B.	12	Civics	18	5	40	Physiology	18	5	40	Physiology	18	5	40
Ph. B.	8	Physical Geog.	18	5	40	English History	18	5	40	Book-keeping	36	5	40
(Equiv. A. B.)	8	Physics	36	5	40	Chemistry	36	5	40	Com'l. Arith.	18	5	40
	10	English	144	5	40	Zoology	18	5	40	Com'l. Law	18	5	40
		Political Econ.	18	5	40	Geology	18	5	40	Didactics	18	5	40
A. B.	4												
B. S.	6												
B. S., M. A.	4												
A. B.	2												

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Ottumwa.	J. E. Roberts, Prin.....	5	Dates Col., Me.....		N. W. Nor., Ill..
	Ests M. Bardwell.....	5	U. of Chi. ....		Grad. Work U. of
	Lily Belland.....	5	U. of Chi. ....		Chi. ....
	Helen Bryden.....	5		So. Ill. State Nor.	Coe, Danville N. Y.
					Coe, Chautau N. Y.
					Nat. Coe, Fenton,
					Mich..
	W. T. Emery.....	5	Beloit Col. ....		U. of Chi. 1 term.
	Mary E. Gardner.....	5	Univ. of Neb.....		
	Louise Hale.....	5	Mt. Holyoke.....		Grad. Work at
					Harvard..
	Calla M. Hand.....	5	Iowa Col.....		Cornell U. Sum.
Oxford Junction					Sch. U. of Chi.
					Sum. Sch..
	C. A. Harpster.....	5	Baker U., Kans..		
	J. L. Kinsey.....	5	Miami Univ.....		U of Chi. 1 Sum, qtr
					Idms Tr. Sch. 1
					Sum. qtr Oxford, O
	Frances G. Perkins.....	5	U of Wis. ....		U. of Chi. 1 qtr....
	Mary L. Phelps.....	5	Lake Forest Col..		
	Fanny Smith.....	5	Miami U. ....		U. of Chi. 1 .....
		6	Drake 4.....		Chi. U. 1 .....
	Josephine Sutherland.....	6	Coe 4.....		
Panora (Guthrie county H. S.)	L. E. Campbell.....	5		I. S. N. S. 3	
	Minnie E. Jennings.....	4		I. S. N. S. 1	
	Nina Hohanshelt.....	5	Simpson Col. 4..		
	Lulu B. Smith.....	5	Parsons Col. 4..		
	Jas. A. King.....	5	Simpson Col. 3..		
	Henry Ness.....	4	I. S. C. 3.....	N. Ill. Nor. 3	
	H. E. Hsley.....	4	Coe 4, S. U. I. 1..		
Parkersburg	J. H. Wood.....	5	Drake U. 5.....		
	Kenneth W. Colgrove.....	7		I. S. N. S. 4	
	Edna M. Windolf.....	5		I. S. N. S. 3	
Paulina	E. E. Martin.....	5	Hanover College (Ind.) 6.....		U. of Louisville (Law) 2.....
	Kate M. Smith.....	5	Iowa Col.....		
	S. H. Bantley (M. sic).....	1	Les. per week.....		
Pella	Wm. C. Farmer.....	4	Central Col. 4, I. W. U. 1.....	I. S. N. S. Sum..	U. of Chi. Sum. qtr
	Lynn S. Anderson.....	5	Cornell Col. 3.....	I. S. N. S. 1 Sum..	Highland Park 1
	Faye B. Gilbertson.....	6	Park Col 4.....		Drake Sum. Sch.

## -FOUR YEAR COURSES.

Preparation.	Yr's experience in H. S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
A. B.....	10	Algebra.....	54	4	40	Electives. —				Astronomy.....	19	4	40
B. S.....		Geometry.....	52	4	40	Latin.....	152	4	40	Botany.....	15	4	40
		Arithmetic.....	14	4	40	German.....	76	4	40	Zoology.....	32	4	40
A. B.....	8	U. S. History.....	36	4	40	Chemistry.....	36	4	40	Eng. History.....	32	4	40
		Physical Geog.....	36	4	40	Geometry Solid.....	19	4	40	Gen'l. History.....	32	4	40
		English.....	152	4	40	Trigonometry.....	19	4	40	Physics.....	32	4	40
		Physiology.....	19	4	40								
B. S.....	5												
A. B.....	4												
A. B.....	4												
Ph. B.....	6												
Ph. B.....	5												
A. B.....	4												
B. S. M. S.....	5												
B. S.....													
Ph. D.....	6	Algebra.....	72	5	35	Civics.....	40	5	35	Political Econ.....	16	5	35
A. M.....	8	Geometry.....	54	5	35	Physical Geog.....	14	5	35	Chemistry.....	24	5	35
		Arithmetic.....	36	5	35	Physics.....	16	5	35	Latin.....	72	5	35
		General Hist.....	36	5	35	English.....	152	5	35				
		U. S. History.....	36	5	35	Physiology.....	16	5	35				
B. Di.....	8	Algebra.....	56	5	41	English.....	108	5	41	Physical Geog.....	16	5	45
		Geometry.....	52	5	45	Physiology.....	24	5	45	Geology.....	24	5	45
Ph. B.....	24	Arithmetic.....	16	5	45	Political Econ.....	16	5	45	Zoology.....	11	5	45
B. A.....	8	General Hist.....	36	5	45	German.....	72	5	45	Word Analysis.....	16	5	45
B. S.....	1	U. S. History.....	24	5	45	Adv. Literature.....	24	5	45	Chemistry.....	24	5	45
		Civics.....	12	5	45	Latin.....	106	5	45				
B. S., M. S.....	6	Physics.....	36	5	45								
B. Pe., Ph. B.....	5	Algebra.....	57	5	35	English.....	152	5	35	Book-keeping.....	19	5	35
M. Di.....		Geometry.....	57	5	35	Physiology.....	19	5	35	Zoology.....	19	5	35
B. Di.....	1	Arithmetic.....	18	5	35	Botany.....	19	5	35	Eng. History on.....			
		General Hist.....	36	5	35	Latin.....	152	5	35	Com'l. Geog.....	19	5	35
		U. S. History.....	19	5	35	Word Analysis.....	19	5	35	Political Econ.....	19	5	35
		Civics.....	19	5	35	Mental Arith.....	19	5	35	Elective.....	19	5	35
		Physical Geog.....	19	5	35								
		Physics.....	33	5	35								
A. B., L. L. B.....	1	Algebra.....	72	5	40	English.....	126	5	40	Physiology.....	36	5	20
A. B.....	1	Geometry.....	36	5	40	Political Econ.....	18	5	40	U. S. History.....	36	5	40
		Arithmetic.....	18	5	40	Botany.....	18	5	40	Solid Geometry.....	18	5	40
		General Hist.....	32	5	40	Zoology.....	18	5	40	Chemistry.....	18	5	40
		Civics.....	36	5	40	Book-keeping.....	36	5	40				
		Physical Geog.....	18	5	40	Latin.....	106	5	40				
		Physics.....	36	5	40								
Ph. B., A. M.....	9	Algebra.....	72	5	35	Civics.....	18	5	35	Political Econ.....	18	5	35
		Geometry.....	54	5	35	Physical Geog.....	18	5	35	Botany.....	18	5	35
		Arithmetic.....	18	5	35	Physics.....	36	5	35	Book-keeping.....	18	5	35
		General Hist.....	36	5	35	English.....	108	5	35	Hist. of Eng. Lit.....	18	5	35
A. B.....	1	U. S. History.....	18	5	35	Physiology.....	19	5	35	Latin.....	108	5	35

## HIGH SCHOOL STATISTICS

High school.	Name of instructor.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Perry ....	Agnes E. Heightshoe .....	5	.....	I. S. N. S. 3 .....	.....
	Cora D. Clark .....	6	.....	I. S. N. S. 2 .....	.....
	Saidie O. Moore .....	6	Uni. Chicago 1-6 Simpson Col. 4 .....	.....	.....
	Mollie Kelly .....	5	.....	I. S. N. S. 2½ .....	.....
	Susan Kersteller .....	6	S. U. I. 2 .....	I. S. N. S. 3 .....	.....
Peterson..	E. G. Clark .....	7	.....	I. S. N. S. 4 .....	.....
	Grace Simpson .....	8	.....	I. S. N. S. 3 .....	.....
Pleasant- ville .....	W. C. Kennedy .....	9	.....	I. S. N. S. ....	Birmingham A. 3 Int. Cor. School, Scranton, Pa. 2.
	Carnie Watkins .....	8	.....	.....	.....
Postville ..	Arthur Wilson .....	4	Cornell Col. 4 .....	.....	.....
	Ethel McEwen .....	6	Iowa Col. 4 U. of Wis. 1 .....	.....	Amer. Classical Col., Rome 1...
	Oda Hall .....	7	Iowa Col. 4 .....	.....	.....
Prairie City ....	Claude C. Smith .....	6	Drake 4 .....	.....	Seminary Marys- ville Mo. 2..... Chillicothe Nor ½
	Nellie I. Delarue .....	8	Drake .....	.....	.....
Pringhar..	H. A. Mitchell .....	6	Green College.... Hoopeston Ill 2 .....	.....	.....
	Laura Rathbun .....	6	Ottawa U. 4 Kan. .....	.....	.....
	Juliette Harmon .....	7	Upper Ia. U 1½ .....	.....	.....
Randolph..	Allan Peterson .....	4	.....	I. S. N. S. 3 .....	.....
	Alice B. Story .....	5	Simpson Col. 4 .....	.....	.....
	Susie Wright .....	5	Simpson Col. 3 .....	.....	.....
Red Oak...	Ralph J. Buck .....	2	U. of Neb. 5 .....	.....	.....
	Rachel Eddelman .....	5	Buchnell U. 4 .....	.....	.....
	Luela Wright .....	6	S. U. I. 3 .....	I. S. N. S. 4 .....	.....
	Nina Holmes .....	6	Cornell Col. 4 .....	.....	.....
	Lela Tullis .....	6	N. W. Uni. 4 .....	.....	.....
	Robert Swaine .....	6	S. U. I. 3 .....	.....	.....
	Merlyn Call .....	6	S. U. I. 4 .....	.....	.....
	Eugene Spencer .....	6	U. of Neb. 8½ .....	.....	.....
Reinbeck..	Thos. E. Johanson .....	5	Uni. Neb. 3 .....	.....	.....
	.....	.....	Uni. Neb. Sum 3. S. U. I. Sum. 1..	.....	Woodbine Nor....
	Ione Westcott .....	7	Lenox Col 4 .....	.....	.....
	Emma. O. Brunett .....	6	Lenox Col Sum. 1 Cornell Col. 4 .....	.....	.....

## —FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yrs experience in H. S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks	Rec. per week	Rec. period	Number weeks	Rec. per week	Rec. period	Number weeks	Rec. per week	Rec. period	Number weeks	Rec. per week	Rec. period
M. Di.	7 1/2	Algebra	54	5 40	Latin	144	5 40	Book-keeping	36	5 40			
H. D.	8 1/2	Geometry	54	5 40	Chemistry	144	5 40	Physiography	18	5 40			
Ph. B.	8	Gen. History	36	5 40	Economics	18	5 40	Botany	18	5 40			
B. M.	7	Civics	18	5 40	Trigonometry	18	5 40	Chemistry	18	5 40			
M. Di., B. A.	8	Physical Geog.	18	5 40	Arithmetic	18	5 40	Economics	18	5 40			
		English	18	5 40	Latin	144	5 40	Trigonometry	18	5 40			
		Hist. Greek	18	5 40	German	72	5 40	Arithmetic	18	5 40			
		Hist. Roman	18	5 40				German	72	5 40			
		Hist. English	18	5 40									
M. Di.	10	Algebra	54	5 35	Physical Geog.	18	5 35	Book-keeping	18	5 35			
S. Di.	2	Geometry	36	5 35	Physics	56	5 35	Political Econ.	18	5 35			
		Arithmetic	18	5 35	English	154	5 35	English Hist.	36	5 35			
		Gen. History	36	5 35	Physiology	18	5 35						
		U. S. History	18	5 35	Latin	108	5 35						
		Civics	18	5 35									
M. E.	10	Algebra	56	5 35	Physical Geog.	16	5 35	Latin	64	5 35			
		Geometry	32	5 35	Physics	32	5 35						
		Arithmetic	32	5 35	English	96	5 35	Book-keeping	24	5 70			
		Gen. History	32	5 35	Physiology	18	5 35	Astronomy	24	5 85			
		U. S. History	16	5 35	Political Econ.	24	5 35	Botany	16	5 85			
		Civics	32	5 35				Zoology	16	5 35			
Ph. B.	11	Algebra	54	5 45	English	162	5 45	Com. Law	18	5 45			
		Geometry	54	5 45	Physiology	18	5 45	Advanced Civics	18	5 45			
		Arithmetic	36	5 45	Latin	108	5 45	Economics	18	5 45			
A. B.	4	Gen. History	36	5 45	German	108	5 45	Botany	18	5 45			
Ph. B.	1	U. S. History	36	5 45				Didactics	18	5 45			
		Civics of Iowa	18	5 45				Geom.—Solid	18	5 45			
		Physical Geog.	18	5 45									
		Physics	36	5 45	Book-keeping	18	5 45						
		Algebra	54	5 40	Physical Geog.	18	5 40	Latin	72	5 45			
		Geometry	36	5 40	Physics	36	5 40						
		Arithmetic	18	5 40	English	144	5 40	Astronomy	18	5 30			
B. Pe.	12 1/2	Gen. History	36	5 45	Physiology	18	5 45	Book-keeping	18	5 00			
B. Pe., B. L. H.	12 1/2	U. S. History	36	5 45	Political Econ.	36	5 45	Botany	18	5 40			
		Civics	36	5 45				Zoology	36	5 40			
		Algebra	7	5 40	Physical Geog.	18	5 40						
		Geometry	60	5 40	Physics	20	5 40	Latin	144	5 40			
M. A.	3	Arithmetic	18	5 40	English	138	5 40	Book-keeping	18	5 00			
S. A.	1	General Hist.	60	5 40	Physiology	10	5 40	Com'l law	18	5 40			
		U. S. History	18	5 40	Political Econ.	18	5 40	Zoology	18	5 40			
		Civics	28	5 40	Botany	18	5 40						
B. Di.	2	Algebra	54	5 40	Civics	36	5 40	Book-keeping	18	5 10			
Ph. B.	3	Geometry	54	5 40	Physical Geog.	18	5 35	Latin	108	5 40			
		General Hist.	36	5 40	Physics	36	5 35						
		U. S. History	36	5 40	English	144	5 35						
B. S.	3	Algebra	54	5 40	English	156	5 40	Bus. Practice	18	5 40			
Ph. B.	3	Geometry	54	5 40	Physiology	18	5 40	Chemistry	36	5 40			
A. B., M. Di.	1	Arithmetic	18	5 40	Political Econ.	18	5 40	Medieval Hist.	18	5 40			
S. A.	2	H. Greek Rom	36	5 40	Latin	144	5 40	German	72	5 40			
H. A.	2	U. S. Hist.	36	5 40				Com'l law	18	5 40			
Ph. B.	1	Civics	18	5 40	Botany	18	5 40						
S. A.	1	Physical Geog.	18	5 40	Zoology	18	5 40						
S. A.	2	Physios	36	5 40									
		Algebra	54	5 40	Physical Geog.	18	5 40	Latin	144	5 45			
		Geometry	54	5 40	Physics	36	5 40						
		Arithmetic	18	5 45	English	116	5 40	Book-keeping	36	5 45			
B. S.	3	General Hist.	36	5 40	Physiology	8	5 40						
S. A.	3	U. S. History	36	5 40	Botany	18	5 45	Com'l law	18	5 45			
		Civics	36	5 40				Political Econ.	18	5 45			

## HIGH SCHOOL STATISTICS

High School.	Name of instructors.	Number of period.	Preparation.		
			Years in College or university.	Years in a State Normal.	Years in other institutions above high school grade.
Benwick..	L. H. Ashline.....	12	.....	I. S. N. S. 1 sum.	.....
	Lizzie A. Marsh.....	8	Bould Col., Harlan Kan. 1.....	Kan. S. N. S. 1½	.....
Riceville..	Paul M. Ray.....	6	.....	.....	W. Nor Col part of 2 yrs Dubu. sum S.
	Cora L. Reid.....	8	Drake 5.	.....	.....
	Edith Ketchum.....	4	.....	.....	Epworth Sem. 4..
Rockford..	S. R. Fitz.....	6	Iowa State Col. 4	.....	.....
	L. C. McMahon.....	6	Chi. Univ. ½	I. S. N. S. ¾	.....
	Edith Waller.....	8	Col. Springs 3 ..	.....	.....
	Arthur Brogue.....	8	Simpson 1.....	.....	.....
	Mrs. Janette English.....	6	.....	I. S. N. S. ½	.....
Rock Rapids..	W. S. Wilson.....	2	.....	N. W. State Nor. Sch. (Pa.) 4 ..	.....
	Helen M. Wolf.....	5	Wis. Univ. 1 ..	I. S. N. S. 1.....	Cortland N. Y. 1. Platteville Wis 1
	Florence Graham.....	1	.....	I. S. N. S. 2 ..	.....
	Myrtle E. Anders.....	4	.....	I. S. N. S. 4 ..	.....
Rockwell..	Fred Mahannah.....	1	Cornell Col. 5 ..	.....	.....
	Susan Elizabeth Baur.....	1	.....	I. S. N. S. 2 ..	.....
Rockwell City. ....	L. C. Bryan.....	2	.....	I. S. N. S. 2½	Epworth Sem. 1..
	C. H. Anthony.....	5	S. U. I. 4 ..	.....	.....
	Belle Tennant.....	4	Cornell Col. 3 ..	.....	.....
	Georgia a Holloway.....	1	Iowa Col. 4 ..	.....	.....
	Ida McQuie.....	2	.....	.....	Highland P. Col. 3
Rock Valley..	B. T. Youel.....	4	.....	I. S. N. S. 3 ..	S. U. I. 1 Sum ..
	Gertrude Hutzenga.....	7	Lake Forest (Ferry Hall) 1.	.....	North West Classical Academy 8 (Orange City) 1a
	Inez McLean.....	7	Amity College 1½	Kirksville (Mo.) 1	.....
Relfe ..	F. L. Cassidy.....	4	Upper Iowa U. 4.	.....	.....
	Emma Larkin.....	1	.....	I. S. N. S. 4 ..	.....
	Irma Evans.....	1	Cornell Col 4 ..	.....	.....
Russell...	S. W. Rowley.....	9	.....	.....	Nor. Dep t. Nebr. Wes. 2.....
	Hattie Worley.....	9	Neb. Wes. 4.....	.....	.....

## —FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yrs experience in H.S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
	2	Algebra .....	54	5	30	Civics .....	33	5	30	Political Econ..	18	5	30
		Geometry .....	54	5	30	Physical Geog..	18	5	30	Botany .....	18	5	30
		Arithmetic .....	36	5	30	Physics .....	36	5	30	Word Analysis..	18	5	30
	1	Gen. History .....	36	5	30	English .....	144	5	30	Latin .....	72	5	30
		U. S. History .....	18	5	30	Physiology .....	18	5	30				
		Algebra .....	54	5	30	Physical Geog..	18	5	30	Geog. Political	18	5	30
	10	Geometry .....	54	5	30	Physics .....	33	5	30	Latin Begin..			
B. Pe., Ph. B		Arithmetic .....	36	5	30	English .....	108	5	30	Caesar .....	108	5	30
		Gen. History .....	36	5	30	Physiology .....	18	5	30	Cleero .....			
		U. S. History .....	36	5	30	Political Econ..	18	5	30				
		Civics .....	18	5	30	Botany .....	18	5	30				
		Algebra .....	54	5	30	Physical Geog..	18	5	30	Zoology .....	18	5	30
B. S.		Geometry .....	54	5	30	Physics .....	36	5	30	Astronomy .....	18	5	30
	12	Arithmetic .....	18	5	30	English .....	162	5	30	Book-keeping ..	18	5	30
B. S.		Gen. History .....	36	5	30	Physiology .....	18	5	30	Political Econ..	18	5	30
	6	U. S. History .....	18	5	30	Latin .....	144	5	30	German .....	72	5	30
		Civics .....	18	5	30								
		Algebra .....	54	5	30	Physical Geog..	24	5	30	Botany .....	18	5	30
	15	Geometry .....	54	5	30	Physics .....	48	5	30	Nat. History..	18	5	30
		Gen. History .....	36	5	30	English .....	156	5	30				
	10	U. S. History .....	12	5	30								
B. Di.	7	Civics .....	24	5	30	Latin .....	144	5	30				
B. Di.	18												
B. S.	6	Algebra .....	72	5	30	Physics .....	36	5	30	Ancient Hist...	36	5	30
M. Di.		Geometry .....	54	5	30	English .....	153	5	30	Modern Hist...	36	5	30
		Arithmetic .....	18	5	30	Physiology .....	9	5	30	Latin .....	72	5	30
		Civics .....	18	5	30	Political Econ..	18	5	30				
		Physical Geog..	18	5	30	Botany .....	18	5	30				
		Algebra .....	54	5	30	Book-keeping....	18	5	30	Political Econ..	18	5	30
M. Di.	9	Geometry .....	36	5	30	Latin .....	144	5	30	Com'l Law .....	1	5	30
B. S.	4	General Hist..	36	5	30					Com'l Geog .....	18	5	30
	14	Civics .....	18	5	30	German .....	72	5	30	Geometry (Solid)	18	5	30
Ph. B.		Physical Geog..	18	5	30					Arithmetic .....	18	5	30
		Physics .....	33	5	30	U. S. History .....	18	5	30	Physiology .....	18	5	30
		English .....	126	5	30					Botany .....	18	5	30
		Algebra .....	54	5	30	Physics .....	18	5	30	Latin .....	144	5	30
B. Di.	6	Geometry .....	36	5	30	English .....	150	5	30				
		Arithmetic .....	12	5	30	Physiology .....	18	5	30	Business Law..	36	5	30
		General Hist..	36	5	30	Political Econ..	18	5	30	Book-keeping ..			
		U. S. History .....	18	5	30	Botany .....	18	5	30	and Com'l Law	36	5	30
	1	Civics .....	18	5	30	Reviews .....	18	5	30	German .....	72	5	30
		Physical Geog..	18	5	30								
		Algebra .....	54	5	30	English .....	144	5	30				
A. E., B. Sc	8	Geometry .....	54	5	30	Physiology .....	18	5	30	Physical Geog..	18	5	30
B. Ped.	3	Arithmetic .....	18	5	30	Political Econ..	18	5	30	Book-keeping ..	18	5	30
A. B.	1	General Hist..	36	5	30	Latin or German	72	5	30	Com'l Law .....	18	5	30
		U. S. History .....	36	5	30	Latin .....	72	5	30	Com'l Arith....	18	5	30
		Physics .....	36	5	30								
		Algebra .....	54	5	30	Physics .....	36	5	30	Chemistry .....	18	5	30
	15	Geometry .....	54	5	30	English .....	138	5	30	Geology .....	18	5	30
		Arithmetic .....	54	5	30	Physiology .....	18	5	30	Hology .....	18	5	30
		General Hist..	36	5	30	Political Econ..	18	5	30				
		U. S. History .....	18	5	30	Latin .....	108	5	30	Com'l Law .....	18	5	30
		Civics .....	36	5	30					Book-keeping ..	18	5	30
		Physical Geog..	24	5	30								

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Ruthven ..	H. A. Welty .....	9	Carthage Col. 1 ..	I. S. N. S. 8 .....	
	Blanche McCattermole. ....	9	Upper Ia. Uni. 4 ..		
	Harry P. Helms .....	10			Spirit Lake Nor. 8
Sabula ....	L. V. Beanlien .....	4	S. U. I. 1 ..		
	Bessie Ellison .....	6	Simpson Col. 4 ..		
	Bertha S. Wolf .....	6	S. U. I. 4 ..		
Sac City ..	O. F. Garrett .....	6	Neb. State Uni. 4 ..		
			Cornell Uni. 2 ..		
	E. C. Kettelkamp .....	2	Gen. Wesleyan U. 4 ..		
	Augusta Connelley .....	7	Ohio State Uni. 4 ..		
	Mary E. Paul .....	6	Colo. Col. 4 ..		
St. Anagar ..	Grace Bidlack .....	2	Drake 2 ..		
St. Anagar ..	F. H. Sunderlin .....	6	Ellsworth Col. 1 ..		Nora Spgs. Sem. 8
	Florence L. Johnson .....	8		I. S. N. S. 4 ..	
Salem ..	R. R. Richmond .....	9		Kan. State Nor. 1 ..	Stockton Acad. 1
	Amy Bliss .....		Whittier ..		Salina Nor. U. 1
Sanborn ..	J. E. Johnson .....	4	S. U. I. 2 ..	I. S. N. S. 3 ..	
	Sarah M. Whitfield .....	7		I. S. N. S. 8 ..	
	Hannah L. Houghton .....	7	S. U. I. 2 ..	I. S. N. S. 2 ..	
	Cordeia S. Treat .....	3		I. S. N. S. 2 ..	
Schaller ..	F. E. Ford .....	7		I. S. N. S. 4 ..	
	Bertha E. Alexander .....		Monmouth C. 1 1/2 ..		
Sergeant Bluff ....			State U. Ind. 1 ..		
			S. U. I. 2 ..		
Sergeant Bluff ....	B. H. Callison .....	7		I. S. N. S. 8 ..	S. U. I. Sem. Ses.
	Clara E. Johnson .....	3			
Seymour ..	J. R. Congill .....	5	N. W. Uni. 1 ..		
	J. S. Stamps .....	8	Amity Col. 2 ..		N. W. Uni. 1/2
	Maude Pettit .....	4		I. S. N. S. 3 ..	H. P. Col. 1 ..
Shelby ....					
	Louis Pelzer .....	5	S. U. I. 1 1/2 ..	I. S. N. S. 8 ..	
	Mary E. Tate .....	6	Iowa Col. 4 ..		
	Ariel Parish .....	7		I. S. N. S. 4 ..	

## —FOUR YEAR COURSES.

Preparation.	Yr's experience in H.S.	High School Courses.											
Degrees held.		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number week.	Rec. per week.	Rec. period.	hasBancut ed.	Number weeks.	Rec. per week.	Rec. period.
B. D	11	Algebra	36	5	15	U. S. History	16	5	35	English	92	5	15
Ph. B.	1	Geometry	30	5	15	Civics	16	5	35	Physiology	16	5	35
		Arithmetic	20	5	35	Physical Geog.	20	5	35	Political Econ.	20	5	35
		Gen. History	80	5	35	Physics	30	5	35				
B. A., M. A.	4	Algebra	54	5	45	Civics	18	5	45	Book-keeping	18	5	45
Ph. B.	8	Geometry	80	5	45	Physical Geog.	18	5	45	Word Study	72	1	45
Ph. B.	2	Arithmetic	18	5	15	Physics	18	5	45	Latin	108	5	45
		Gen. History	30	5	15	English	120	5	45				
		U. S. History	36	5	15	Physiology	18	5	45				
A. M.	15	Algebra	54	5	15	Physics	30	5	15				
B. Ph.	7	Geometry	54	5	45	English	120	5	40	Com'l Law	18	5	40
B. Ph.	8	Arithmetic	12	5	40	Political Econ.	18	5	40	Zoology	20	5	40
B. Ph.	1	Gen. History	30	5	40	Botany	2	5	45	German	72	5	40
B. Ph.	1	U. S. History	18	5	40					Physiology	16	5	40
	4	Civics	28	5	40	Latin	141	5	40				
		Physical Geog.	18	5	40	Book-keeping	18	5	45				
B. Di.	8	Algebra	54	5	45	Physics	18	5	45	Ancient History	36	5	45
	6	Geometry	30	5	45	English	16	5	45	History Europe	36	5	45
		Arithmetic	18	5	45	Physiology	18	5	45	English History	14	5	40
		U. S. History	22	5	40	Political Econ.	18	5	45	Business Law	18	5	40
		Civics	18	5	45	Book-keeping	18	5	45				
		Physical Geog.	18	5	45	Word Analysis	18	5	30				
		Algebra	68	5	40	U. S. History	24	5	40	English	170	5	40
	8	Geometry	34	5	40	Civics	68	5	40	Political Econ.	34	5	40
		Arithmetic	64	5	40	Physical Geog.	34	5	40	Latin	68	5	40
		Gen. History	51	5	40	Physics	51	5	40				
B. Ph. M. Di.	4	Algebra	54	5	40	English	140	5	40	Book-keeping	18	5	40
M. Di.	1	Geometry	54	5	40	Political Econ.	18	5	40	Zoology	19	5	40
B. Di.	6	Arithmetic	18	5	40	Botany	30	5	40	Physiology	19	5	40
B. Di.		Gen. History	50	5	40	Penmanship	30	5	20	English History	14	5	40
		U. S. History	18	5	40					Com'l Geog.	18	5	40
		Civics	18	5	40	Latin	144	5	40	Review Algebra	18	5	40
		Physical Geog.	18	5	40	Com. Arithmetic	18	5	40	Com'l Law	18	5	40
		Physics	80	5	40								
M. Di.		Algebra	54	5	35	Physical Geog.	18	5	30	Botany	18	5	40
		Geometry	30	5	35	Physics	30	5	35	Book-keeping	18	5	30
		Arithmetic	18	5	30	English	144	5	40	Latin	108	5	35
Ph. B.		Gen. History	50	5	30	Physiology	18	5	30				
		Civics	18	5	30	Political Econ.	18	5	30				
M. Di.	2	Algebra	54	5	30	Civics	18	5	30	Botany	12	5	30
		Geometry	30	5	30	Physical Geog.	18	5	30	Book-keeping	18	5	30
		Arithmetic	18	5	30	Physics	3	5	30	Latin	144	5	30
		Gen. History	80	5	30	English	62	5	30				
		U. S. History	18	5	30	Political Econ.	24	5	30				
	7	Algebra	64	5	35	Civics	20	5	35	Botany	12	5	35
	6	Geometry	64	5	35	Physical Geog.	18	5	35	English Hist.	10	5	35
	1	Arithmetic	32	5	35	Physics	16	5	35	Latin	61	5	35
		Gen. History	32	5	35	English	91	5	35				
		U. S. History	16	5	35	Political Econ.	18	5	35				
M. Di.	3	Algebra	54	5	35	Physical Geog.	18	5	35	Latin	144	5	35
Ph. B.	6	Geometry	54	5	35	Physics	30	5	35				
M. Di.		Arithmetic	18	5	35	English	120	5	35	German	72	5	35
		Gen. History	80	5	35	Physiology	18	5	35	English Hist.	18	5	35
		U. S. History	18	5	35	Political Econ.	18	5	35	Astronomy	18	5	35
		Civics	18	5	35					Eng. Classics	90	5	35

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Sheldon ..	O. M. Elliott .....	1	Marietta Ohio C. 4		
	Elizabeth M. Gill .....	4	S. U. 1. Sum 1		
	Lillian C. McCain .....	2	Cornell 2		
	Jessie Maude Lickie .....	6	Cornell 3		
	Augusta E. Hitchcock .....	6	Cornell 4		
	A. R. Nichols .....	5	Uni. Chicago 1		
Shell Rock	A. W. Moore .....	5	Lombard Col. 3	I. S. N. S. 1½	
	Erie Collins .....	6	Upper Iowa 4	I. S. N. S. Sum. 1	
	Maye Loomis .....	7			
Shenan- doah ....	Carrie E. Huting .....	6	Iowa Col. 5		
	Zelma Goldaworthy .....	4	Iowa Col. 4		U. of Minn. 5 mo. (Grad. Work) ..
	A. Claire Goodwill .....	5	Knox Col. 4		West. Nor. Col. 3
	Jennie Taylor .....	5	Dury Col. (Spring field, Mo.) 4		U. of Chi. (Post Grad. Work) ..
	Frank M. Stettler .....	4			
Sibley ....	L. B. Parsons .....	4	Upper Iowa U. 1.		
	Dea Lodwick .....	7	Cornell Col. 3	I. S. N. S. 1½	U. of Chi. ½
	Olara Kink .....	8	Carleton Col. 4		Charles City Col. ½
Sidney ....	Chas. S. Cobb .....	4		I. S. N. S. 3	Sum. at Drake and Lincoln ...
	Della Simons .....	6	U. of Neb. (Lin- coln) 2½		
	Jennie Stiles .....	6	Tabor Col. 3		Sum. at Drake and Lincoln ...
	Lillian Eaton .....	6	Iowa Col. 2½		Simpson Col. 1..
Sigourney	H. P. Trumbo .....	5		I. S. N. S. 3	
	Ida Perry .....	6	U. of Mich. 3½		
	Lida Updegraff .....	6	Iowa Col. 1		
	Grace Hankens .....		Cornell Col. 3		
	Laura Carrell .....				
Sioux Cen- ter .....	E. J. Strick .....	5	Hope Col. 4		U. of Mich. 6 wks
	Miss W. Vander Linden .....	8	Central U. (Ia) 4		
	J. DeKoster (½ time) .....	8			

## —FOUR YEAR COURSES.

Preparations.	Degrees held.	Yr's experience in H. S.	High School Courses.											
			Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
A. B.	13	8	Algebra	54	5	45	Geometry	54	5	45	Latin	144	5	45
A. B.	8	5 1/2	U. S. History	18	5	45	U. S. History	18	5	45	German	72	5	45
A. B.	8	5 1/2	Civics of U. S.	18	5	45	Physics	36	5	45	Latin or German	72	5	45
A. B.	8	5 1/2	English	108	5	45	Physical Geog.	18	5	45	Eng. Classics	36	5	45
A. B., M. Di.	1	4	Botany	36	5	45	Com. Geog.	18	5	45	Bus. Course	216	5	45
B. Sc.	4													
M. Di.	5		Algebra	54	5	40	Physical Geog.	18	5	40	Book-keeping	18	5	40
M. Di.			Geometry	54	5	40	Physics	36	5	40	Reviews	18	5	40
M. Di.			Arithmetic	36	5	40	English	144	5	40				
			General Hist.	36	5	40	Physiology	18	5	40	Latin	72	5	40
			U. S. History	18	5	40	Political Econ.	18	5	40	German	72	5	40
			Civics	18	5	40	Botany	18	5	40				
Ph. B.	2 1/2	4	Algebra	54	5	40	Latin	144	5	40	Zoology	18	5	40
Ph. B.	2 1/2	4	Geometry	36	5	40	Electives	126	5	40	Book-keeping	18	5	40
A. B.	2 1/2	4	Arithmetic	24	5	40					Geom. (Solid)	18	5	40
			U. S. History	18	5	40	Electives				Adv. Civics	18	5	40
			Civics	18	5	40	Greek History	18	5	40	Political Econ.	18	5	40
			Physical Geog.	18	5	40	Rom. History	18	5	40	Physics	36	5	40
			English	144	5	40	Eng. History	18	5	40	Coml. Geog.	18	5	40
			Physiology	18	5	40	Botany	18	5	40				
						German	72	5	40					
A. B.	10		Algebra	54	5	40	Physics	36	5	40	Coml. Arith.	18	5	40
Ph. B.	4		Geometry	54	5	40	English	126	5	40	Book-keeping	18	5	40
B. L.	1		Arithmetic	18	5	40	Botany	18	5	40	German	72	5	40
			General Hist.	36	5	40	Review	18	5	40	Political Econ.	18	5	40
			U. S. History	18	5	40					Review	18	5	40
			Civics	18	5	40	Latin	144	5	40				
			Physical Geog.	18	5	40								
B. Di.	10		Algebra	54	5	40	Physical Geog.	18	5	40	Latin	144	5	40
			Geometry	54	5	40	Physics	36	5	40				
			Arithmetic	18	5	40	English	144	5	40	Book-keeping	18	5	40
			General Hist.	36	5	40	Political Econ.	18	5	40	Correspondence	18	5	40
			U. S. History	18	5	40	Zoology	18	5	40	German	72	5	40
			Civics	18	5	40								
Ph. B.	8		Algebra	54	5	40	Physics	36	5	40				
B. Di.	8		Geometry	54	5	40	English	108	5	40	Book-keeping	18	5	40
			Arithmetic	36	5	40	Physiology	18	5	40	Business Train.	18	5	40
			General Hist.	36	5	40	Political Econ.	18	5	40	Political Hist.	18	5	40
A. B.	6		U. S. History	18	5	40	Botany	18	5	40	Geology	18	5	40
			Civics	18	5	40					Word Analysis	18	5	40
			Physical Geog.	18	5	40	Latin	144	5	40	Reading	18	5	40
A. B.	2		Algebra	54	5	35	Civics	24	5	35	Lit. Reading	76	5	35
			Geometry	36	5	35	Physical Geog.	22	5	35	Reviews	14	5	35
			Arithmetic	18	5	35	Physics	38	5	35	Pedagogy	10	5	35
			Gen. History	36	5	35	English	114	5	35	Latin	114	5	35
			U. S. History	14	5	35	Physiology	22	5	35				

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of pupils.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Sioux City	George E. Marshall.....	1	Columbia .....		
	Elizabeth Bills.....	1	Cornell .....		
	A. R. Thomas .....	1	U. of Chicago .....		
	Bertha W. Blum.....	1	S. U. I. ....		
	Fanny Burling.....	1	U. of Chicago .....		
	Marion I. Durand.....	1	U. of Mich. ....		
	Blanch E. Lewis.....	1	U. of Chicago .....		
	George W. Tidd.....	1	Steuerman Col. ....		
	Florence A. Shaw.....	1	U. of Wis. ....		
	Helen W. Syverson.....	1	U. of S. Dak. ....		
	Mrs. H. K. Del Foese.....	1	Rockhill Sem. ....		
	A. Marie Lynch.....	1	S. U. I. ....		
	Maud McMaster.....	1	Cornell Col. ....		
	Paul Dorweiler.....	1	S. U. I. ....		
	A. H. Smith.....	1	Dickinson Col. ....		
	P. A. Bond.....	1	S. U. I. ....		
	H. W. White.....	1	Simpson .....		
	E. W. Freeland.....	1	Baker Uni. ....		
Sioux Falls	H. W. Storka.....	1	Buena Vista Col. ....		
	Adah G. Grandy.....	1	U. of Wis. ....		
Sioux Falls	W. J. Hunt.....	1	Ames 5.....	I. S. N. S. 4.....	
	Agnes Mosher.....	1			
	Blanche Roberts.....	1		Kansas Nor. 5.....	
Sloan	C. E. Moffitt.....	1	S. U. I. 4.....		
	Alvena Hansen.....	1	Mich Univ. Chi. ....		
	Emily Aston.....	1	Univ. I. ....	I. S. N. S. 2.....	
	D. U. Hall.....	1	Coe Col. 4.....		Morningside College 8 1/2.....
Spencer	A. H. Avery.....	1			
	D. M. Odle.....	1	Bridgeville Col 6.....		
	Lodima A. Willis.....	1	U. of Wis. 1.....	St Nor Platteville (Ore) 4.....	St. Univ. Colo. ....
	O. C. Williard.....	1	Drake 5.....		
	Ina L. Hill.....	1	S. U. I. Iowa Col 4.....		
	R. L. Collett.....	1	Iowa State Col 4.....		
Spirit Lake	T. Frank Pearson.....	1	Parsons Col. 8.....		Wash. Acad. 8...
	Ada Ellen Clark.....	1	Coe Col. 4.....		
	Edythe A. Acheson.....	1		I. S. N. S. (terms) 1.....	
Springville	F. N. Nisley.....	1	Coe Col. 7.....		
	Eunice Eystatone.....	1	Iowa Wesleyan 8.....		
Stanwood	Paul S. Filer.....	1	S. U. I. 5.....		
	Mrs. M. Scherrebeck.....	1		I. S. N. S. 2.....	N. Y. Acad. 2.....

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yrs experience in H. S.	High School Courses.									
			Branches studied	Number weeks.	Rec. per week.	Rec. per week.	Branches studied.	Number weeks.	Rec. per week.	Rec. per week.	Branches studied	Number weeks.
B. A.			Algebra .....	36	5	4	Political Econ...	18	5	45	Chemistry.....	36
Ph. B.			Geometry .....	42	5	45	Latin .....	144	5	45	Geology .....	18
B. A.			Arithmetic .....	36	5	45	Greek .....	72	5	45	Botany .....	18
Ph. B.			U. S. History .....	18	5	45	German .....	72	5	45	Eng. History...	18
Ph. B.			Civics of U. S. ....	18	5	45	Botany.....	18	5	45	Ancient History	18
B. A.			Physical Geog. ....	18	5	45					Latin.....	144
Ph. B.			Physics .....	36	5	45	Eng. History....	18	5	45	Business Course	36
B. S.			English .....	144	5	45	Ancient History.	36	5	45		
Ph. B.			Physiology.....	18	5	45						
B. A.												
Ph. B.												
Ph. B.												
B. A.												
B. A.												
B. S.												
B. A.												
Ph. B.												
			Algebra .....	72	5	40	Physical Geog...	36	5	40	Latin.....	72
M. Di.		6	Geometry .....	84	5	40	Physics .....	36	5	40	Word Study .....	12
			Arithmetic .....	36	5	40	English .....	84	5	40	Book-keeping ..	18
			Gen. History .....	36	5	40	Political Econ...	18	5	40	Botany .....	18
			U. S. History .....	18	5	40	Orthography .....	36	5	40	Economics .....	18
			Civics .....	18	5	40						
Ph. B.		1	Algebra .....	54	5	40	Physical Geog...	18	5	40	Latin.....	144
			Geometry .....	54	5	40	Physics .....	36	5	40	Word Analysis ..	12
		3	Arithmetic .....	18	5	40	English .....	144	5	40		
Ph. B.		3	Gen. History .....	36	5	40	Physiology .....	18	5	40	Political Econ...	18
			U. S. History .....	18	5	40	Botany.....	18	5	40	German .....	72
		2	Civics.....	18	5	40					Eng. History...	18
		14	Algebra .....	54	5	40	English .....	144	5	40	Ger. or Science	72
A. M.		50	Geometry .....	54	5	40	Physiology .....	18	5	40	Ger. or Latin...	72
			Arithmetic .....	18	5	40	Political Econ...	18	5	40	Physical Geog..	18
		13	Gen. History .....	54	5	40	Botany.....	18	5	40	Zoology.....	18
Ph. B.		2	U. S. History .....	46	5	40	Latin.....	72	5	40	Geology .....	36
			Civics .....	18	5	40						
Ph. B.			Physics .....	36	5	40	Latin.....	72	4	40		
B. Sc.												
B. A.			Algebra .....	54	5	40	Physiology .....	18	5	40	U. S. History...	36
Ph. B.			Geometry .....	36	5	40	Latin.....	144	5	40	German .....	72
			Arithmetic .....	18	5	40	German.....	72	5	40	Polit. Economy	18
			Gen. History .....	36	5	40					Solid Geometry	18
			Civics .....	18	5	40	Botany.....	18	5	40	Psychology .....	36
			Physics .....	36	5	40	Physical Geog..	18	5	40		
			English .....	144	5	40						
B. Ph.		4	Algebra .....	54	5	40	Physical Geog..	18	5	40	Book-keeping ..	18
			Geometry .....	36	5	40	Physics.....	36	5	40	English Hist...	12
			Arithmetic .....	18	5	40	English .....	84	5	40	Music .....	36
			General Hist...	36	5	40	Physiology .....	18	5	40	Latin .....	108
			U. S. History .....	18	5	40	Political Econ ..	18	5	40		
			Civics .....	18	5	40	Botany.....	18	5	40		
B. A.		2	Algebra .....	54	5	45	Civics .....	18	5	45	Book-keeping ..	18
		10	Geometry .....	54	5	45	Physical Geog..	18	5	45	Ancient Hist...	36
			Arithmetic .....	18	5	45	Physics .....	36	5	45	Modern Hist...	36
			General Hist...	18	5	45	English .....	144	5	45	Latin .....	108
			U. S. History .....	18	5	45	Political Econ...	18	5	45		

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period	Préparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Storm-Lake ....	A. O. Fuller, Supt. ....	2	S. U. I. 1 U. Chi 1	I. S. N. S. 4.....	Armour Inst. ½..
	Clara R. Bamber. ....	5	Cornell Col. 2½..	.....	U. of Chi. 1.....
	Nellie A. Regan. ....	7	Iowa Col. 4.....	.....	.....
	Julia H. Braginton. ....	7	Cornell Col. ½..	I. S. N. S. 1.....	.....
	Thomas Teakle. ....	6	I. S. N. S. ....	.....	.....
	Lulu Stevens. ....	8	Iowa Col. ....	.....	Prov. Acad 4 Chi. Central Conserva- tory 2..
Story City	E. E. Waters. ....	7	.....	I. S. N. S. ....	.....
	Maud Wakefield. ....	8	Iowa State Col. 4 ..	.....	.....
Stuart	C. McCracken. ....	1	S. U. I. 1.....	.....	Ind. Normal 8....
	A. M. Allison. ....	4	Susquehanna U. 2 ..	.....	.....
	.....	4	Backnell Unit. 2..	.....	.....
	M. Ella C. McNichols. ....	4	.....	.....	.....
	Lina Haviland Moore. ....	6	S. U. I. 2.....	I. S. N. S. 2.....	.....
Sumner.	Wiltzima Van Syoc. ....	7	Simpson Col. 4 ..	.....	Simpson Nor. 2..
	.....	.....	.....	.....	Simpson S. of Or. 2
Sumner.	Thos. J. Durant. ....	6	Upper Iowa U. 6 ..	.....	.....
	Gladys Kiefer. ....	6	.....	I. S. N. S. 3 ..	.....
Sutherland	F. E. Tellier. ....	6	Iowa Col. 4.....	.....	.....
	.....	.....	S. U. I. 1.....	I. S. N. S. 1 Sum.	Uni. of Chi. 3 mo.
	Edith C. Swan. ....	6	Iowa Col. 4.....	.....	Grad. Col. ....
	Nellie A. Chase. ....	6	S. U. I. 4.....	.....	.....
	Ruby E. Parish. ....	6	Iowa Col. 4.....	.....	.....
Tipton ....	C. Ray Aurner. ....	2	S. U. I. 1.....	I. S. N. S. 4.....	U. of Chi. 1-6....
	Hallie Jennings. ....	7	.....	I. S. N. S. 5.....	.....
	Eta Ruth Parsons. ....	7	Cornell Col. 2.....	I. S. N. S. 1.....	S. U. I. Sum. Ses.
	Ruth Pratt. ....	6	Cornell Col. 4.....	.....	.....
	Mrs. C. R. Aurner. ....	4	S. U. I. 1. Drake 8	.....	.....
Toledo ....	Ethel F. Carpenter. ....	5	Cornell Col. 4.....	.....	Cornell Nol. Dept.
	Walter S. Donat. ....	6	Western Col. 4 ..	.....	.....
	.....	.....	Yale U. 1.....	.....	Western Col. Acad
	Emma Hancock. ....	7	Ia. State Col. 8.....	.....	Upper Ia. Uni. 2..
	Mabel Smith. ....	7	Western Col. 8 ..	.....	N. W. Univ. 1....
Traer ....	F. L. Mahannah. ....	5	S. U. I. ....	.....	Nor. Ind. Nor. 4 ..
	Harry Lambert. ....	7	.....	I. S. N. S. ....	.....
	Clara Blonde. ....	7	S. U. I. ....	.....	Oaken Nor. 1.....
Union ....	J. T. Fackler. ....	7	Cornell Col. 3.....	I. S. N. S. 3.....	.....
	Ada B. Zane. ....	9	Iowa Col. 4.....	.....	.....

## -FOUR YEAR COURSES.

Preparation.	Yr's experience in H.S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
M. Di.	7	Algebra.....	54	5 40		Physical Geog.	18	5 40					
Ph. B.	18	Geometry.....	54	5 40		Physics.....	36	5 40		Com'l law.....	36	5 40	
		Arithmetic.....	18	5 40		English.....	144	5 40		Com'l Arith.....	18	5 40	
	6	General Hist.....	36	5 40		Political Econ.....	18	5 40		Book-keeping.....	18	5 40	
M. Di.	4	U. S. History.....	18	5 40									
		Civics.....	18	5 40		Latin.....	144	5 40		German.....	72	5 40	
	7												
B. Di.	8	Algebra.....	72	5 30		Physical Geog.	18	5 35		Book-keeping.....	18	5 45	
B. Ph.	2	Geometry.....	36	5 40		Physics.....	24	5 40		Etymology.....	24	5 30	
		Arithmetic.....	42	5 40		English.....	96	5 30		Orthography.....	12	5 30	
		General Hist.....	36	5 25		Physiology.....	12	5 20		Latin.....	72	5 20	
		U. S. History.....	36	5 30		Political Econ.....	18	5 30					
		Civics.....	30	5 30		Botany.....	18	5 35					
B. A.	18	Algebra.....	54	5 35		Physical Geog.	18	5 35					
A. B.	4	Geometry.....	54	5 35		Physics.....	36	5 35		Latin.....	144	5 35	
		Arithmetic.....	18	5 35		English.....	126	5 35					
	8	Gen. Hist.....	36	5 35		Physiology.....	18	5 45		German.....	72	5 35	
M. Di.	6	U. S. Hist.....	18	5 35		Botany.....	18	5 35		Bookkeeping.....	18	5 45	
Ph. B.		Civics.....	18	5 35		Chemistry.....	18	5 35		Com'l Geog.....	18	5 35	
B. S.	12	Algebra.....	54	5 45		Physical Geog.	36	5 45		Word Analysis.....	18	5 35	
	1	Geometry.....	36	5 45		Physics.....	36	5 45		Bookkeeping.....	18	5 30	
		Arithmetic.....	27	5 45		English.....	126	5 45		Astronomy.....	18	5 45	
		Gen. Hist.....	36	5 40		Physiology.....	18	5 45		Com'l Geog.....	18	5 45	
		U. S. Hist.....	18	5 40		Political Econ.....	20	5 45					
		Civics.....	18	5 40		Reviews—							
		Algebra.....	54	5 35		Physics.....	36	5 35		Bookkeeping.....	18	5 35	
A. B., A. M.	7	Geometry.....	54	5 35		English.....	108	5 35					
Ph. B.		Gen. Hist.....	36	5 35		Political Econ.....	18	5 35		Latin.....	144	5 35	
Ph. B.		U. S. Hist.....	18	5 35		Botany.....	18	5 35		German.....	36	5 35	
Ph. B.	8	Civics.....	18	5 35		Zoology.....	18	5 35					
Ph. B. M. Di.	18	Algebra.....	54	5 35		Physical Geog.	18	5 35		German.....	72	5 35	
B. Di.	7	Geometry.....	54	5 35		Physics.....	36	5 35		Economics.....	18	5 35	
	8	Arithmetic.....	18	5 35		English.....	62	5 35		Com'l. Law or			
A. B.		General Hist.....	36	5 35		Physiology.....	118	5 35		Book-keeping.....	18	5 35	
Ph. B.	2	U. S. History.....	18	5 35						Roman History.....	18	5 35	
		Civics.....	18	5 35		Latin.....	144	5 35		English History.....	18	5 35	
	10	Algebra.....	54	5 40		Physics.....	36	5 40		Latin.....	144	5 40	
		Geometry.....	54	5 40		English.....	144	5 40					
B. A.	3	General Hist.....	36	5 40		Physiology.....	18	5 40		Arithmetic.....	36	5 40	
B. Sc.	1	U. S. History.....	18	5 40		Botany.....	18	5 40		Political Econ.....	19	5 40	
Ph. B.	2	Civics.....	18	5 40		Higher Arith.....	18	5 40		German.....	72	5 40	
		Physical Geog.	18	5 40						Reviews.....	18	5 40	
B. S.	9	Algebra.....	54	5 45		Physics.....	36	5 40					
M. Di.	1	Geometry.....	54	5 45		English.....	162	5 40		Book-keeping.....	18	5 40	
	8	Arithmetic.....	36	5 45		Physiology.....	18	5 40		Orthography.....	18	5 40	
		General Hist.....	36	5 40		Political Econ.....	18	5 40		Botany.....	18	5 40	
		U. S. History.....	18	5 40						Com'l. Law.....	18	5 40	
		Civics.....	18	5 40		Latin.....	144	5 40		Com'l. Geog.....	18	5 40	
		Physical Geog.	18	5 40		German.....	72	5 40					
B. Ph. M. Di.	6	Algebra.....	54	5 45		Civics.....	18	5 40		Political Econ.....	18	5 40	
B. Ph.		Geometry.....	36	5 45		Physical Geog.....	19	5 40		Botany.....	18	5 45	
		Arithmetic.....	18	5 40		Physics.....	39	5 40		Latin.....	144	5 40	
		General Hist.....	36	5 45		English.....	108	5 40					
		U. S. History.....	18	5 40		Physiology.....	18	5 40					

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Valley Jct.	W. O. Reed .....	3	E. P. Col. 3	I. S. N. S. 1½	
	Pearl Sheffield .....	4	Drake 4.		
	Edna Pugh .....	4	Drake 4		
	Blanche Pinkston .....	7	Drake 4.		
Victor ...	A. S. Reid .....	9	Drake 5, Yale	I. S. N. S. 1	
	Godfrey Messer .....		Univ. 2½	I. S. N. S. 2	
Villisca...	C. C. Ball .....	4	Oce Col. 4		
	H. W. Hackett .....	6	Penn. Col. 2½		
			S. U. I. 2		
	Letha Jones .....	6	Cornell Col. 4		
	Jessie Wiseman .....	6	Cornell Col. 3		O. W. Univ. 1
	Leonora Wallace .....	6	Red River Valley Univ. 1		
Vinton...	A. M. M. Dornon .....	1	Geneva Col. 3½		
			S. U. I. 1 term		Blairsville, Pa. A. 1, New Alexander Acad. 2.
	James Rae .....	4	Simpson Col. 4.		I. S. Col. 1 term.
	Ethel Golden .....	6	S. U. I. 2½		Cornell C. 2 term
	Blanche McLaughlin .....	4		I. S. N. S. 4 tr.	
	Mrs. Elizabeth Sherwood .....	6	S. U. I.		
	Mrs. Minnie Thompson .....	8		Minn. S. N. 1	
Wall Lake	M. R. Timmerman .....	6	Iowa State C. 1½	I. S. N. S. 1½	
	Mrs. Hattie Timmerman .....	7		I. S. N. S. 3	
	Mrs. Ada Shollenberger .....	8		I. S. N. S. 1	
Walnut ...	L. J. White .....	5	Drake (Sum) 3, S. U. I. 2		Western Nor. 3.
	Ella Moore .....	6	Cornell C. I. S. U. I. 1	I. S. N. S. 2	
	Lucile Landers .....	7	S. U. I. 4		
	Della Meier .....	2	Oberlin 1		
Wapello ..	John W. McCulloch .....	4		I. S. N. S. 1	Valparaiso 3
	Phila G. Russell .....	6	I. U. U. 2		
	Kittie M. Grimes .....	6		I. S. N. S. 2	
	Izola M. Sweeney .....	2		I. S. N. S. 2	Valparaiso 3
Washington	J. A. Biggs, Prin. ....	3	Lake Forest U. 4		Lake Forest A. 1.
	Stena Hansen .....	5		I. S. N. S. 4	U. of Chi. ½
	Margaret Lahey .....	5	S. U. I. 4		
	Carolyn Ball .....	6	S. U. I. 2	I. S. N. S. 3	
	Ella Woodford .....	5	U. of Neb. ½		U. of Chi. ½
			S. U. I. ½		
	Ethel G. Nichols .....	5	S. U. I. 4		
	Mary W. Bryant .....	6	Iowa Col. 4		Harvard U. ½
	H. E. Case .....	6	U. of Wis. 2	Wis. State Nor. 8	

## —FOUR YEAR COURSES.

Preparation.		Yrs experience in H.S.	High School Courses.										
Degrees held.	Branches studied.		Branches studied.			Branches studied.			Branches studied.				
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.			
B. Di.....	11	Algebra.....	54	1	40	Political Econ..	18	1	40	Geography.....	18	1	40
B. Pe.....	8	Geometry.....	36	1	40	Com'l. Law.....	18	1	40	Zoology.....	18	1	40
B. Pe.....	2	General Hist..	36	5	40	Book-keeping..	12	1	40	Arithmetic.....	18	1	40
B. Pe.....	12	U. S. History..	18	5	40	Latin.....	144	5	40	English History	18	5	40
		Civics.....	36	5	40	Physiology.....	18	5	40	Botany.....	18	5	40
		Physical Geog..	18	1	40	Geometry Solid.	18	5	40	Review.....	18	1	40
		Physics.....	36	1	40								
		Eng'ish.....	144	5	40								
A. B., M. A., M. Di	6	Algebra.....	64	1	40	Physical Geog..	16	5	40	Book-keeping..	16	5	40
	6	Geometry.....	44	5	40	Physics.....	36	5	40	Word Analysis.	36	5	40
		Arithmetic.....	36	1	40	English.....	144	5	40	Geology.....	20	1	40
		Gen. History..	36	5	40	Physiology.....	20	1	40	Music.....	36	1	40
		U. S. History..	36	5	40	Political Econ..	6	5	40	Writing.....	3	1	40
		Civics.....	16	5	40	Botany.....	20	5	40	Drawing.....	36	1	40
Ph. B.....		Algebra.....	54	5	40	Hist—Roman.....	1	1	40	Botany.....	36	1	40
		Geometry.....	54	1	40	Hist—English..	1	5	40	Economics.....	36	1	40
B. S., M. S.....		Arithmetic.....	36	1	40								
A. B.....	2	U. S. History..	18	5	40	Latin.....	1	1	40	Arithmetic.....	36	1	40
A. B.....		Physics.....	36	5	40					Physical Geog..	36	5	40
		English.....	144	1	40	Arithmetic.....	36	1	40	Bot. or Zoology	36	1	40
	2	Hist—Greek...	18	5	40	Physical Geog..	16	5	40	Chemistry.....	3	1	40
		Algebra.....	54	5	40	Physics.....	36	5	40	Physiology.....	18	1	40
		Geometry.....	54	1	40	English.....	14	1	40	Geography.....	18	1	40
		Arithmetic.....	18	5	40	Political Econ..	1	1	40	Zoology.....	18	1	40
M. S., A. B.....	18	Gen. History..	54	5	40	Botany.....	18	5	40	Geology.....	18	1	40
		U. S. History..	18	5	40					Book-keeping..	18	5	0
B. Ph.....	7	Civics.....	18	5	40	Latin.....	144	5	40	Hist—English..	18	1	40
B. A., M. A.....	3	Physical Geog..	18	5	40					Chemistry.....	36	1	40
B. Di M. Di.....	9	Algebra.....	54	1	35	Civics.....	36	5	35	Political Econ..	18	1	35
B. Di.....	6	Geometry.....	54	1	35	Physical Geog..	36	5	35	Botany.....	18	5	35
		Arithmetic.....	36	5	35	Physics.....	36	5	35	Word Analysis.	36	5	35
		Gen. History..	36	1	35	English.....	108	5	35	Astronomy.....	18	5	35
		U. S. History..	18	5	35	Physiology.....	16	5	35	Spelling.....	18	1	35
B. Di.....	9	Algebra.....	54	1	40	Civics.....	27	5	40	Political Econ..	18	1	45
B. A. B. Di.....	4	Geometry.....	7	1	45	Physical Geog..	18	5	40	Latin.....	144	1	45
B. S.....	1	Arithmetic.....	18	1	40	Physics.....	36	5	40	Reviews.....	36	1	45
		Gen. History..	36	1	45	English.....	144	5	40				
		U. S. History..	18	1	40	Physiology.....	18	5	40				
M. Di.....	2½	Algebra.....	54	5	35	Civics.....	18	5	35	German.....	36	5	35
	1	Geometry.....	54	5	35	Physical Geog..	18	5	35	Book-keeping..	18	1	35
B. Di.....	1	Arithmetic.....	18	5	35	Physics.....	36	5	35	Latin.....	144	5	35
B. Di.....		General Hist..	36	5	35	English.....	126	5	35				
		U. S. History..	18	5	35	Physiology.....	18	5	35				
		Algebra.....	54	5	40	English.....	180	5	40				
Ph. B.....	3	Geometry.....	54	1	40	Physiology.....	18	5	40	German.....	72	5	40
M. Di.....	8	General Hist..	36	5	40	Botany.....	18	5	40	Arithmetic.....	18	1	40
Ph. B.....	4	U. S. History..	18	5	40	Word Study.....	36	2	40	Political Econ..	18	5	40
Ph. B., M. Di.....	3	Civics.....	18	5	40	Eng. History..	18	5	40	Book-keeping..	18	1	40
		Physical Geog..	18	1	40					Coml. Law.....	18	5	40
		Physics.....	36	1	40	Latin.....	144	5	40				
A. B.....	1												
A. B.....	1												
B. Sc., M. Di.....	1½												

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Waterloo (East)...	E. S. Hamm, Prin .....	8	Lake Forest U. 4.		Lake Forest A. 2.
	Mary McDuffie .....	4		I. S. N. S. 3.	
	Lillian E. Richert .....	4		I. S. N. S. 3.	
	Bessie E. Costrell .....	5	U. of Wis. 4		
	Mary Norton .....	5	Drake 2, S. U. 1		U. of Chl. ½
	Florence L. Joy .....	5	S. U. I. 4		
	Floy M. Bennett .....	5		I. S. N. S. 3.	
	Mae Belle Allstrand .....	5	S. U. I. 3		
	Susan Hemmenway .....	5		I. S. N. S. 3.	
	Maudie Foote .....	6		I. S. N. S. 3.	
	C. K. Warne .....	6	Upper I. U. 4.		
	Nettie N. Hoxie .....	4	N. W. U. 2.	I. S. N. S. 3.	Cornell (N. Y.) summer tr. ....
	Newton Miller .....	5	U. of Ind. 5.		
	Nettie Banyon .....	4		I. S. N. S. 2½	T. O. Acad. (Vinton) .....
Waterloo (West)...	Margaret Montgomery, Prin .....	8	Muskegon U. 2	I. S. N. S. 4.	
	Marrie Mason .....	5	N. W. U. 4.		
	Evelyn Johnson .....	5			Ind. U. 1 term....
	Jennie Speer .....	5		I. S. N. S. 4.	
	Lillian E. Waits .....	5	S. U. I. 4.		
	Eleanor Hosofeld .....	5	S. U. I. 4.		
	Mrs. D. K. Bond .....	6		I. S. N. S. 3.	
Waukon ..	J. H. Bowers Supt. ....	3	West Va. Univ. ....	Fairmont State ..	Ohio Wesleyan ...
	Lena Donaldson Prin. ....	6	Upper Ia. Univ. 4		
	Leah Ricker .....	5			Highland P. Col. 4
	Francis Oaswell .....	8	Mich. Univ. ....		
Waverly ..	W. F. Cramer .....	3	Cornell 5, Upper Ia. Univ. 4.		
	Bertha L. Glattly .....	6	Univ. Mich. 1.		
	Viola Knoche .....	6		I. S. N. S. 3.	
	Letta D. Horner .....	7	Drake 1, N. W. Univ. 1.	I. S. N. S. 3.	
	J. D. Robinson .....	7	Upper Ia. Univ. 4 Univ. Mich. 8.		
Webster City..	L. H. Ford .....	1	Univ. of Wooster Ohio 6.		
	Mrs. L. Elizabeth Wilson .....	5	Univ. Wisconsin. Cal. S. School ....	N. E. State Nor	Newbury Sem. ...
	Laura A. White .....	5	Univ. Neb. 4.		
	F. B. Gainer .....	3	Monmouth Col. 4.		
	Beulah Crawford .....	5	Cornell Col. 4.		
	Gladys Whitley .....	5	S. U. I. 4.		
Wellman.	Abraham O. Thomas .....	7	S. U. I. 4.		
	Clara M. Vermillion .....	7	S. U. I. 1½		

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yrs experience in H.S.	High School Courses.											
			Branches studied.			Number weeks.			Branches studied.			Number weeks.		
			Branches studied.	Number weeks.	Rec. per week.	Rec. period.			Branches studied.	Number weeks.	Rec. per week.	Rec. period.		
A. B.	B.	6	Algebra .....	54	5	40	Caesar .....	18	5	40	Botany .....	18	5	40
B. Di.	B.	6	Geometry .....	36	5	40	Cicero .....	18	5	40	Zoology .....	18	5	40
B. Di.	B.	6	Arithmetic .....	8	2	40	Virgil .....	18	5	40	Chemistry .....	18	5	40
B. A.	B.	8 1/2	General Hist. ....	30	5	40	Adv. Physiology	18	5	40	Coml. Law or	36	5	40
A. B.	B.	8 1/2	Civics of U. S. ....	18	5	40	or Botany .....	18	5	40	German .....	18	5	40
A. B.	B.	8 1/2	Physics .....	36	5	40	Chem. or Ger....	18	5	40	Book-keeping ..	18	5	40
Ph. B., B. Di.	B.	8 1/2	English .....	126	5	40	Eng. History....	18	5	40	Geometry-Solid	18	5	40
B. Di.	B.	8 1/2	Latin .....	18	5	40	Political Econ...	18	5	40	Coml. Course...	144	5	40
B. A.	B.	8 1/2												
B. Di.	B.	8 1/2												
B. Di.	B.	8 1/2												
B. S.	B.	8 1/2												
M. A.	B.	8 1/2												
	B.	8 1/2												
A. B., M. Di.	B.	6	Algebra .....	54	5	45	Political Econ...	18	5	45	Physiology .....	18	5	45
A. B.	B.	6	Geometry .....	36	5	45	Botany .....	18	5	45	Eng. History .....	36	5	45
B. A.	B.	6	Arithmetic .....	18	5	45	Zoology .....	18	5	45	Coml. Arith .....	18	5	45
B. A.	B.	6	General Hist. ....	30	5	45	Latin .....	144	5	45	Book-keeping .....	18	5	45
M. Di.	B.	6	U. S. History .....	18	5	45	Physical Geog..	18	5	45	Coml. Geog .....	18	5	45
B. S.	B.	6	Civics .....	18	5	45					Coml. Law .....	18	5	45
Ph. B.	B.	6	English .....	144	5	45								
	B.	12												
A. B., L. L. B.	B.	6	Algebra .....	57	5	40	Political Econ. .	19	5	40	Geology .....	18	5	40
B.	B.	2	Geometry .....	57	5	40	Botany .....	19	5	40	Bookkeeping .....	19	5	40
B. S.	B.	2	Gen. Hist. ....	38	5	40	Chemistry .....	38	5	40	Eng. Hist. ....	11	5	40
	B.	1	U. S. History .....	19	5	40	Latin .....	152	5	40	Astronomy .....	19	5	40
	B.	1	Civics of U. S. ....	19	5	40	Word analysis...	19	5	40	Eng. Grammar...	19	5	40
	B.	1	Physics .....	28	5	40	Physical Geog..	19	5	40	Higher Arith...	19	5	40
	B.	1	English .....	138	5	40								
	B.	1	Physiology .....	19	5	40								
A. B., B. S.	B.	25	Algebra .....	48	5	40	English .....	156	5	40	Zoology .....	36	5	40
B. S.	B.	9	Geometry .....	48	5	40	Physiology .....	18	5	40	Botany .....	36	5	40
	B.	1	Arithmetic .....	36	5	40	Political Econ...	18	5	40	German .....	72	5	40
	B.	1	Gen. Hist. ....	36	5	40	Latin .....	144	5	40	Latin .....	72	5	40
	B.	2	U. S. Hist. ....	18	5	40	German .....	72	5	40	Physical Geog..	18	5	40
	B.	2	Civics .....	18	5	40	Botany .....	18	5	40	Com'l Course...	352	5	40
	B.	2	Physical Geog..	18	5	40								
B. S., L. L. B.	B.	2	Physics .....	36	5	40								
	B.	18	Algebra .....	54	5	45	English .....	180	5	45	Bookkeeping .....	35	5	45
B. A., M. A.	B.	1	Geometry .....	54	5	45	Physiology .....	18	5	45	Comp. & Rhet...	36	5	45
	B.	1	Gen. Hist. ....	72	5	45	Latin .....	144	5	45	German .....	72	5	45
	B.	1	U. S. Hist. ....	32	5	45								
	B.	1	Physics .....	36	5	45								
B. A.	B.	1												
B. A.	B.	1												
B. A.	B.	1												
B. A.	B.	2												
B. Ph.	B.	1	Algebra .....	54	5	40	Civics of U. S. .	18	5	35	Political Econ...	18	5	35
	B.	1	Geometry .....	54	5	40	Physical Geog. .	18	5	35	Latin .....	72	5	35
	B.	1	Arithmetic .....	36	5	35	Physics .....	36	5	40				
	B.	1	Gen. Hist. ....	36	5	35	English .....	144	5	35				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
West Liberty..	E. F. Schall .....	2	Univ. of Mich 2..	.....	S. U. I. 4 Sum.
	Emma Henderson .....	5	U. of Chl. 4. ....	.....	Sessions
	Maude Smith .....	5	S. U. I. 4. ....	.....	Chautauque N. Y.
	Pearl Van Tuyl .....	6	.....	I. S. N. S. 3	.....
	Edith W. Merritt .....	2	S. U. I. 6. ....	.....	.....
West Union...	James C. Sanders .....	4	Coe Col 3 S. U. I. 1	.....	.....
	Elizabeth Kaye .....	4	Western Col 1. ....	I. S. N. S. 1	.....
	Otto V. Wille .....	6	Upper Iowa Uni. 1	I. S. N. S. 3	.....
	Nelle B. Sebern .....	6	S. U. I. 4. ....	.....	.....
	Mr. Dykens .....	1	S. U. I. 4. ....	.....	.....
	Helen Crafts .....	2	.....	.....	.....
	Jessie Sherman .....	1	.....	.....	.....
What Cheer...	John E. Witmer .....	5	Iowa Col. 4. ....	.....	S. U. I. 1 term U. of Chl. 2 term.
	Effie Rolles .....	7	.....	I. S. N. S. ....	.....
	Martha Mcasham .....	4	S. U. I. 1 ....	I. S. N. S. 1	.....
Whiting ..	F. H. Stewart .....	7	.....	I. S. N. S. 3	.....
	Alice Morgan .....	9	Bellevue Col. 3. ....	.....	.....
Williams..	E. E. Bovee .....	10	.....	Central State Nor. of Mich 4..	U. of Mich 1 Sum.
	Irene M. Campbell .....	10	Drake 3. ....	.....	.....
Williamsburg..	N. E. Johnson .....	4	.....	.....	.....
	Mrs. T. W. Tomasek .....	6	S. U. I. 5. ....	.....	.....
	Hugy Veblen .....	6	S. U. I. 5. ....	.....	.....
Wilton Jet	Will. A. Pye .....	5	Cornell Col. 4. ....	.....	.....
	Mary Buffan .....	7	S. U. I. 4. ....	.....	.....
	Ethel Conn .....	6	Drake 4. ....	.....	.....
Winfield ..	Francis G. Robb .....	5	Parsons Col. 4. ....	.....	Grad. Work U. of Wis. Sum. So. 1/2 S. U. I. 5. So. So. 1/2
	Martha Pattie .....	7	Beuna Vista Col. 3 S. U. I. 2..	.....	Iowa State Col. 1
	Ruth E. Erwin .....	4	Simpson Col. 2 1/2..	.....	.....
Winterset.	L. D. Salisbury .....	2	.....	Dip. in Sp'l Adv Music I. S. N. S. 3	.....
	Emory D. Bream .....	3	Pa. Col. 4. ....	.....	1 U. I. S. 8. 6 w. Car. C. Su. N. 8. 6
	Elizabeth Mayor .....	6	Marthage Col. 4..	.....	.....
	Ether L. Cooper .....	5	S. U. I. 4. ....	.....	.....
	Katharine Zeller .....	6	Simpson Col. 4. ....	.....	.....
	Effie Turner .....	1	.....	I. S. N. S. 3 Sum.	Drake Sum. 8. 6..

## —FOUR YEAR COURSES.

Preparation.	Degrees held.	Yrs experience in H. S.	High School Courses.											
			Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
			Algebra .....	54	5	35	Physics .....	36	5	35				
		22	Geometry .....	54	5	35	English .....	44	5	35	Civics .....	18	5	35
Ph. B.		7	Arithmetic .....	36	5	35	Political Econ .....	18	5	35	Botany .....	18	5	35
Ph. B.		1	General Hist .....	54	5	35	Book-keeping .....	18	5	35	German .....	72	5	35
B. Di		1	U. S. History .....	36	5	35								
Ph. B.			Physical Geog. ....	18	5	35	Latin .....	144	5	35				
			Algebra .....	72	5	45	Pennanship .....	36	5	30	Economics .....	18	5	45
B. S. M. Di		15	Geometry .....	54	5	45	Spelling .....	36	1	30	Physiography .....	18	5	45
B. Di		3	Arithmetic .....	18	5	45	Com'l law .....	18	5	45				
B. A			U. S. History .....	18	5	45	Latin .....	144	5	45	Geo. Drawing .....	36	5	30
			Civics of U. S. ....	18	5	45					Stenography .....	36	5	30
			Physics .....	36	5	45	Ancient Hist .....	36	5	45	German .....	72	5	45
			English .....	182	5	45	Med. Mod. Hist .....	36	5	45	Typewriting .....	36	5	30
			Botany .....	36	5	45	English Hist .....	18	5	45				
			Book-keeping .....	18	5	45								
			Algebra .....	54	5	35	Civics .....	18	5	35	Political Econ .....	16	5	45
Ph. B.		4	Geometry .....	54	5	35	Physical Geog .....	20	5	35	Ger. or Latin .....	108	5	35
B. Di		2	Arithmetic .....	18	5	35	Physics .....	36	5	35	Book-keeping .....	18	5	35
		8	General Hist .....	36	5	35	English .....	108	5	35				
			U. S. History .....	18	5	35	Physiology .....	18	5	35				
M. Di			Algebra .....	56	5	40	Civics of U. S. ....	18	5	40	Political Econ .....	12	5	40
M. A		3	Geometry .....	54	5	40	Physical Geog .....	24	5	40	Botany .....	18	5	45
			Arithmetic .....	18	5	40	Physics .....	36	5	45	Book-keeping .....	18	5	40
			General Hist .....	36	5	40	English .....	10	5	45	Latin .....	72	5	45
			U. S. History .....	12	5	40	Physiology .....	12	5	40				
		3	Algebra .....	108	5	30	Civics .....	18	5	30	Political Econ .....	18	5	30
A. B.		1	Geometry .....	36	5	30	Physical Geog .....	18	5	30	Botany .....	18	5	30
			Arithmetic .....	36	5	30	Physics .....	36	5	30	Geography .....	36	5	30
			General Hist .....	36	5	30	English .....	108	5	30	Book-keeping .....	18	5	30
			U. S. History .....	36	5	30	Physiology .....	18	5	30	Latin .....	44	5	30
		15	Algebra .....	54	5	50	U. S. History .....	18	5	50	English .....	50	5	50
B. S.		7	Geometry .....	54	5	50	Civics .....	24	5	50	Physiology .....	18	5	50
B. S.			Arithmetic .....	36	5	50	Physical Geog .....	18	5	50	Political Econ .....	18	5	50
			Gen. History .....	36	5	50	Physics .....	36	5	50	Latin .....	108	5	50
Ph. B.		4	Algebra .....	63	5	45	Physics .....	36	5	35	Chemistry .....	9	5	45
Ph. B.			Geometry .....	54	5	45	English .....	116	5	45	Reviews .....	27	5	35
Ph. B.			Arithmetic .....	27	5	35	Physiology .....	18	5	35				
			Gen. History .....	36	5	35	Political Econ .....	9	5	45	Book-keeping .....	18	5	
			U. S. History .....	18	5	35	Beginning Latin .....	80	5	35	Com'l Law .....	18	4	35
			Civics .....	18	5	35	Latin .....	108	5	35				
			Physical Geog. ....	36	5	35								
			Algebra .....	54	5	35	Civics .....	36	5	35	Political Econ .....	18	5	35
B. S.		3	Geometry .....	54	5	35	Physical Geog .....	18	5	35	Botany .....	18	5	35
			Arithmetic .....	36	5	35	Physics .....	36	5	35	Book-keeping .....	18	5	35
B. Ph.			Gen. History .....	36	5	35	English .....	144	5	35	Latin .....	72	5	35
		1	U. S. History .....	18	5	35	Physiology .....	18	5	35				
			Algebra .....	54	5	40	Physics .....	36	5	40	Book-keeping .....	18	5	40
B. Di		5	Geometry .....	54	5	40	English .....	144	5	40	Botany .....	18	5	40
A. B.		2	Arithmetic .....	36	5	40	Physiology .....	18	5	40	German .....	72	5	40
A. B.		1	Gen. History .....	36	5	40	Political Econ .....	18	5	40	Eng. History .....	18	5	40
Ph. B.		2	U. S. History .....	18	5	40	Music .....	86	2	40	Political Econ .....	18	5	40
Ph. B.		2	Civics .....	18	5	40	Latin .....	144	5	40				
		2	Physical Geog. ....	18	5	40								

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Woodbine.	H. A. Kinney .....	7	.....	.....	.....
	H. A. Reed .....	8	.....	.....	.....
	G. B. Rigg .....	8	S. U. I. 3 .....	.....	Woodbine Nor. 3.
	F. J. Howe .....	8	Knox Col. 3.	.....	Armour Inst. 1.
	J. W. Bolender .....	8	Albion Col. 1½ .....	St. Nor. Col. 1 Yp. Mich.	.....
	Mrs. W. H. Vining .....	2	Simpson Col. 3 .....	.....	Woodbine Nor. 4.
Wyeming.	Albert W. Graham, .....	7	S. U. I. 1 .....	I. S. N. S. 3 .....	.....
	Mae A. Speidel .....	8	S. U. I. 5 .....	.....	.....
Zearing ...	Austin Johnson .....	8	.....	I. S. N. S. 3 .....	.....
	Blanche McIntosh .....	10	.....	I. S. N. S. 3 .....	.....

## —FOUR YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
.....	26	Algebra .....	80	5 15	Physical Geog. .	21	5 3	.....	.....	.....	.....	.....	.....
.....	29	Geometry .....	60	5 15	Physics .....	40	5 35	Latin .....	140	5 35	.....	.....	.....
B. S., B. D. ....	11	Arithmetic .....	40	5 35	English .....	16	5 35	Book-keeping ..	20	5 70	.....	.....	.....
M. Ed. ....	12	Gen. History .....	40	5 15	Physiology .....	2	5 35	Botany .....	20	5 35	.....	.....	.....
.....	2	U. S. History .....	20	5 15	Political Econ. .	20	5 35	German .....	80	5 35	.....	.....	.....
.....	3	Civics .....	20	5 15	.....	.....	.....	Chemistry .....	20	5 35	.....	.....	.....
B. D1 .....	4	Algebra .....	60	5 35	Civics .....	21	5 35	Political Econ. .	18	5 40	.....	.....	.....
B. A. ....	1/2	Geometry .....	30	5 40	Physical Geog. .	21	5 35	Botany .....	1	5 35	.....	.....	.....
.....	.....	Arithmetic .....	12	5 35	Physics .....	31	5 40	Hist.—Ancient ..	31	5 40	.....	.....	.....
.....	.....	U. S. History .....	18	5 1	English .....	108	5 40	Book-keeping ..	18	5 35	.....	.....	.....
B. D1 .....	4	Algebra .....	40	5 35	Physics .....	36	5 20	H. of Education	12	5 35	.....	.....	.....
B. D1 .....	2	Geometry .....	30	5 35	English .....	10	5 25	H. of Eng. Lan.	5	5 35	.....	.....	.....
.....	.....	Arithmetic .....	16	5 35	Physiology .....	24	5 25	Book-keeping ..	26	5 30	.....	.....	.....
.....	.....	Gen. History .....	3	5 35	Political Econ. .	16	5 25	Spelling .....	144	2 25	.....	.....	.....
.....	.....	U. S. History .....	22	5 15	.....	8	5 25	Latin .....	36	5 35	.....	.....	.....
.....	.....	Civics .....	28	5 35	Chemistry .....	28	5 50	.....	.....	.....	.....	.....	.....
.....	.....	Physical Geog ..	34	5 35	Psychology .....	12	5 35	.....	.....	.....	.....	.....	.....

*Note:* The subjects in the preceding courses are arranged in groups, separated by blank lines. The first group is pursued by all pupils; the remaining groups are supplemental and determine the character of the course.

## HIGH SCHOOL STATISTICS

High School.	Name of instructors.	Number of period.	Preparation.		
			Years in College or university.	Years in a State Normal.	Years in other institutions above high school grade.
Ainsworth	R. S. Dix.....	.....	.....	I. S. N. S 4 .....	.....
Albion .....	F. H. Tigert .....	7 .....	.....	I. S. N. S. 3.....	.....
	Mrs. W. B. Mantie.....	8 .....	Cornell Col 4.....	.....	.....
Allison .....	J. P. Street.....	8 .....	.....	.....	Deborah Inst 2....
Anthon .....	Paul J. Scarbro. ..	8 .....	.....	I. S. N. S 1.....	Highland Park 2.
	Nellie Ray .....	9 .....	.....	I. S. N. S 1.....	Morningside Col 1
Aplington	A. C. Voelker .....	12 .....	.....	Con'l State Nor. Mt Pleasant Mch 8 .....	.....
Arcadia .....	Ernest Walker .....	12 .....	.....	I. S. N. S 3. ....	.....
Aurelia ..	Chas. D. Curtis.....	6 .....	Hilldale Col. 2 (Moh), Drake U. 3 .....	.....	.....
	Lottie Farr.....	6 .....	.....	I. S. N. S. 3 .....	.....
Bagley .....	Elmer E. Franklin.....	12 .....	.....	I. S. N. S. 3 .....	West Nor. Col. 1 (Shenandoah)...
Baldwin .....	D. S. Welch .....	12 .....	.....	.....	.....
Bancroft..	Sid J. Backus.....	6 .....	Drake (Sum) 5.....	.....	Tobtn 1. ....
	Mary L. Sutton. ....	8 .....	Cornell.....	I. S. N. S. 1.....	.....
	Mary Ring.....	8 .....	.....	.....	.....

**-THREE YEAR COURSES.**

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H.S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. per period.	Number weeks.	Rec. per week.	Rec. per period.	Number weeks.	Rec. per week.	Rec. per period.	Number weeks.	Rec. per week.	Rec. per period.
M. Di.	2	Algebra	50	5	30	Civics	13	5	25	Botany	15	5	30
		Geometry	34	5	30	Physical Geog.	16	5	25	Book-keeping	34	5	50
		Arithmetic	15	5	30	English	34	5	25	Spelling	34	5	15
		General Hist.	50	5	30	Physiology	13	5	30	Latin	34	5	30
		U. S. History	16	5	15	Political Econ.	16	5	25				
B. Di.	4	Algebra	25	5	40	Civics	33	5	30	Political Econ.	15	5	30
Ph. D.	7	Geometry	72	5	40	Physical Geog.	16	5	30	Botany	36	5	30
		Arithmetic	33	5	30	Physics	33	5	40	Geology	20	5	30
		General Hist.	31	5	30	English	44	5	30	Latin	72	5	30
		U. S. History	33	5	30	Physiology	133	5	30				
	3	Algebra	54	5	45	U. S. History	13	5	30	English	126	5	30
		Geometry	54	5	45	Civics	13	5	30	Physiology	13	5	30
		Arithmetic	18	5	45	Physical Geog.	13	5	30	Political Econ.	13	5	30
		General Hist.	33	5	45	Physics	33	5	45				
	8	Algebra	52	5	30	Civics	33	5	40	Political Econ.	23	5	30
	1	Geometry	35	5	30	Physical Geog.	23	5	30	Botany	16	5	25
		Arithmetic	26	5	30	Physics	23	5	30	Orthography	16	5	30
		General Hist.	35	5	30	English	34	5	30	Book-keeping	16	5	30
		U. S. History	8	5	25	Physiology	16	5	30				
	4	Algebra	72	5	30	Civics	34	5	25	Book-keeping	12	5	40
		Geometry	33	5	25	Physical Geog.	31	5	30	Orthography	36	5	16
		Arithmetic	33	5	45	Physics	33	5	30	Pennmanship	36	5	30
		General Hist.	36	5	30	English	36	5	25				
		U. S. History	12	5	30	Physiology	36	5	30				
B. Di	1	Algebra	72	5	30	Civics	30	5	25	Political Econ.	10	5	25
		Geometry	36	5	25	Physical Geog.	30	5	30	Botany	13	5	25
		Arithmetic	40	5	30	Physics	36	5	25	Book-keeping	13	5	25
		General Hist.	36	5	25	English	144	5	25				
		U. S. History	36	5	30	Physiology	36	5	30				
B. Pe.	3	Algebra	54	5	40	Civics	18	5	40	Political Econ.	12	5	40
	3	Geometry	35	5	40	Physical Geog.	19	5	40	Botany	15	5	40
		Arithmetic	36	5	40	Physics	24	5	40	Book-keeping	15	5	40
		Gen. History	36	5	40	English	90	5	40	Latin	72	5	40
		U. S. History	36	5	40	Physiology	18	5	40				
B. Di.	4	Algebra	51	5	30	Civics	30	5	30	Physiology	16	5	30
		Geometry	33	5	30	Physical Geog.	30	5	30	Political Econ.	13	5	30
		Arithmetic	36	5	30	Physics	36	5	30				
		Gen. History	36	5	30	English	33	5	30				
	18	Algebra	48	5	30	Civics	53	5	20	Political Econ.	28	5	30
		Geometry	36	5	30	Physical Geog.	33	5	30	Orthography	16	5	30
		Arithmetic	24	5	30	Physics	28	5	30	Latin	44	5	30
		Gen. History	36	5	30	English	72	5	30				
		U. S. History	24	5	30	Physiology	20	5	30				
	10	Algebra	36	5	35	Civics	36	5	30	Political Econ.	18	5	35
	4	Geometry	31	5	35	Physical Geog.	19	5	30	Botany	18	5	30
	3	Arithmetic	36	5	35	Physics	33	5	40	Zoology	18	5	30
		Gen. History	36	5	30	English Lit.	108	5	35				
		U. S. History	18	5	30	Physiology	18	5	35				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Batavia ..	Anna Rowland.....	18	O. O. Col. 3 I. S. Col. 1.....		St. Kathryn's 3..
Baxter....	E. A. Crawford.....	11	Western Col. 1 I. S. Col. 8½.....	I. S. N. S. ½.....	
Bayard....	L. M. Boggs.....	6			Caldwell Nor. 3 (Ohio).....
	John Corregan.....	3			
Bellevue ..	B. S. Asquith.....	5		I. S. N. S. 4 .....	
	E. O. Knox.....	7	Oce Col. 4.....		
	A. K. Bovard.....	4			
Blanchard.	Aletha Montgomery.....	6		I. S. N. S. 1.....	Washington A. 4.
	Ethel J. Purinton.....			Neb. State Nor. 4 (Peru).....	
Boyden ...	H. P. Mowrer .....				Western Normal.
Bristow... W. W. Crawford.....		1	Iowa State 1½.....	I. S. N. S. 2.....	
Cam- bridge..	W. H. Davis.....	11		I. S. N. S. 3.....	
	W. W. Ballard.....	4			
	(One class in 9th grade.)				
Carlisle ...	W. M. McGee.....	12			
Casey.....	J. O. Hantley .....	7		I. S. N. S. 4 .....	
	Bemie Johnson.....	7	Iowa Col 4.....		
Castana...	W. E. Atkinson.....	8	S. U. I. 2.....		
	Harry Biddinger.....	6		Rochester Ind. 2.	Vorhies Bus. Col. Indianapolis 1.....
	Selina Pendleton Wilson...	6		Woman's Col Balt- timore 4.....	
Chelsea....	H. M. Tiffany .....	12			Palmer Col 1 term

Preparation.		High School Courses.											
Degrees held.	Y's experience in H.S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
A. B.	2	Algebra	48	5	30	Civics	16	5	30	Political Econ.	16	5	30
		Geometry	53	5	30	Physical Geog.	16	5	30	Botany	16	5	30
		Arithmetic	52	5	30	Physics	16	5	30	Latin	64	5	30
		Gen. History	52	5	30	English	16	5	30				
		U. S. History	52	5	30	Physiology	16	5	30				
		Algebra	51	5	25	Physical Geog.	18	5	30	Ancient Hist.	16	5	30
		Geometry	56	5	25	English	72	5	25	Latin	72	5	25
		Arithmetic	19	5	35	Physiology	14	5	25				
		Civics	58	5	30	Political Econ.	14	5	25				
		Algebra	72	5	40	U. S. History	19	5	40	English	90	5	40
		Geometry	54	5	40	Civics	13	5	40	Physiology	18	5	40
		Arithmetic	19	5	40	Physical Geog.	14	5	40	Political Econ.	18	5	40
Gen. History	58	5	40	Physics	36	5	40						
M. Di.	4	Algebra	50	5	30	Physics	72	5	35	Botany	18	5	35
		Geom.—Plane	36	5	35	English	72	5	35	Latin—Beginn'g	16	5	35
		Gen. History	54	5	35	Physiology	12	5	35	Cæsar	26	5	35
		Civics of U. S.	18	5	35	Political Econ.	12	5	35	Virg.	26	5	35
		Algebra	72	5	40	Gen. History	36	5	35	English Lit.	106	5	40
		Geometry	28	5	40	Physical Geog.	24	5	40	Political Econ.	1	5	40
		Arithmetic	36	5	40	Physics	36	5	40				
		Algebra	50	5	30	Physical Geog.	30	5	25	Book-keeping	16	5	25
		Geometry	36	5	30	Physics	36	5	25	Music	36	5	30
		Arithmetic	36	5	25	English	106	5	25	Latin	36	5	25
		General Hist.	36	5	25	Physiology	16	5	25				
		Civics	36	5	25	Political Econ.	20	5	25				
B. Di.	2	Algebra	52	5	30	Civics	36	5	30	Political Econ.	18	5	30
		Geometry	36	5	30	Physical Geog.	16	5	30	Botany	18	5	30
		Arithmetic	36	5	30	Physics	36	5	30	Book-keeping	16	5	30
		General Hist.	36	5	30	English	0	5	30				
		U. S. History	18	5	30	Physiology	19	5	25				
		Algebra	50	5	25	U. S. History	26	5	25	Physiology	18	5	25
		Geometry	36	5	25	Civics of U. S.	24	5	5	Political Econ.	16	5	25
		Arithmetic	14	5	25	Physical Geog.	18	5	25	Botany	19	5	25
		General Hist.	36	5	25	English	102	5	25	Latin	36	5	25
		Algebra	54	5	30	Civics	36	5	30	Physiology	18	5	30
		Geometry	56	5	30	Physical Geog.	19	5	25	Political Econ.	18	5	30
		General Hist.	36	5	25	Physics	36	5	45	Botany	18	5	30
U. S. History	36	5	25	Eng. Literature	106	5	25	Zoology	18	5	30		
M. Di.	4	Algebra	51	5	40	U. S. History	18	5	35	English	108	5	35
		Geometry											

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in state Normal.	Years in other institutions above high school grade.
Churdan..	J. T. Bradshaw .....	8 .....	.....	.....	Toronto Normal
	Fern Williams.....	Tabor College 4	.....	.....	Ontario, Can. 1..
Cincinnati	P. B. Woods.....	S. U. I. 1.....	.....	.....	Collegiate Inst. 4.
	W. E. Moore.....	8 .....	.....	.....	Valpariso Col. 4
Clarence..	M. E. Fayram .....	.....	.....	I. S. N. S. ....	(Ind.).....
	Ida Fell.....	.....	.....	I. S. N. S. ....	S. E. Iowa Ner. 3
Clearmont	F. E. Heckel.....	12 Upper Ia. Univ. 5	.....	.....	Harde Bus. Col. 3/4
	.....	U. of Chi. 2 3/4.....	.....	.....	.....
Coin.....	A. E. Woodrow.....	8 Drake 1. ....	.....	.....	High. Park Col. 2
	Jennie Wilson. ....	9 .....	.....	I. S. N. S. 3. ....	O. C. O. C. 3 mo..
Collins....	C. Clarence Baker.....	10 West'n Md. Col. 5.	.....	.....	.....
	.....	.....	.....	.....	.....
Columbus City..	H. H. Winder.....	12 .....	I. S. N. S. 6 wks.	.....	.....
	Lillian Van Horn.....	19 Drake 18 U. I. 6 w.	I. S. N. S. 6 wks.	.....	Iowa City Acad. 1
Conway...	W. W. Palmer.....	13 .....	.....	.....	Valpar. No. (Ind.)
	Ada Harvey.....	1 .....	.....	.....	.....
Craw-fordsville	George W. Weber.....	12 .....	.....	I. S. N. S. 3 .....	.....
	.....	.....	.....	.....	.....
Cumber-land..	G. M. Grimes.....	11 .....	.....	I. S. N. S. 3 .....	.....
	.....	.....	.....	.....	.....
Cushing..	Nettie Wells.....	.....	.....	.....	Lincoln Ner. C. 3
	D. E. Gemmell .....	.....	.....	.....	(Lincoln, Neb.)
Danbury..	H. S. Stein.....	12 S. U. I. 1 .....	I. S. N. S. 4 .....	.....	Denmark Acad. 3.
	.....	.....	.....	.....	.....

## —THREE YEAR COURSES.

Preparation.		High School Course.											
Degrees held.	Yr's experience in H. S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
		Algebra .....	72	5	35	Civics .....	25	5	35	Political Econ..	11	5	35
		Geometry .....	36	5	35	Physical Geog. ....	10	4	35	Music .....	108	5	20
		Arithmetic .....	36	5	35	Physics .....	28	4	35	Latin .....	108	5	35
		Gen. History .....	36	5	75	English .....	82	5	35				
A. B. ....													
		Algebra .....	34	5	40	U. S. History ....	16	5	35	English .....	82	5	35
A. M. ....		Geometry .....	34	5	40	Civics .....	20	5	35	Physiology ....	14	5	35
		Arithmetic .....	34	5	40	Physical Geog. ....	18	5	35	Political Econ..	18	5	40
		Gen. History .....	34	5	40	Physics .....	84	5	40	Book-keeping ..	16	5	40
M. Di. ....													
		Algebra .....	48	5	30	English .....	60	5	50	Elocution .....	12	5	20
		Geometry .....	36	5	30	Political Econ..	12	5	25	Book-keeping ..	12	5	30
		General Hist. ....	36	5	30	Botany .....	24	5	30	Latin .....	108	5	30
		Civics .....	12	5	30	Mental Arith. ....	12	5	30				
		Physics .....	36	5	30	Word Analysis ..	12	5	30				
Ph. B. ....	1½	Algebra .....	44	5	30	Civics .....	86	5	20	Political Econ..	20	5	20
		Geometry .....	32	5	30	Physical Geog. ....	20	5	25	Book-keeping ..	16	5	30
		Arithmetic .....	56	5	30	Physics .....	86	5	30	Com'l. Law. ....	16	5	25
		General Hist. ....	36	5	20	English .....	72	5	30	Writing .....	32	5	20
		U. S. History .....	28	5	20	Physiology .....	16	5	20				
B. D. ....													
B. Di. ....		Algebra .....	64	5	30	Physical Geog. ....	24	5	30				
		Geometry .....	36	5	45	Physics .....	20	5	40	Latin .....	86	5	35
		Arithmetic .....	4	5	30	English .....	92	5	35				
		General Hist. ....	36	5	30	Physiology .....	36	5	30	Book-keeping ..	20	5	45
		U. S. History and Civics..	36	5	30	Political Econ..	16	5	40	Botany .....	8	5	45
A. B. ....													
		Algebra .....	72	4	30	Civics .....	18	4	30	Physiology .....	36	4	30
		Geometry .....	40	4	30	Physical Geog. ....	18	4	30	Political Econ..	36	4	30
		Arithmetic .....	36	4	30	Physics .....	36	4	30				
		U. S. History .....	36	4	30	English .....	72	4	30				
		Algebra .....	48	5	30	U. S. History ....	48	5	30	English .....	112	5	25
		Arithmetic .....	48	5	30	Civics .....	32	4	25	Orthography ..	32	5	25
		Gen. History .....	82	4	25	Physical Geog. ....	16	5	25	Latin .....	82	5	30
		Algebra .....	48	5	30	Civics .....	40	5	30	Physiology .....	20	5	30
		Arithmetic .....	68	5	30	Physical Geog. ....	20	5	30	Political Econ..	20	5	30
		Gen. History .....	48	5	30	Physics .....	20	5	30				
		U. S. History .....	30	5	30	English .....	40	5	30				
M. Di. ....													
		Algebra .....	39	5	35	U. S. History ....	24	5	35	English .....	108	5	30
		Geometry .....	24	5	35	Civics .....	36	5	30	Physiology .....	18	5	30
		Arithmetic .....	72	5	30	Physical Geog. ....	18	5	30	Political Econ..	16	5	30
		Gen. History .....	34	5	30	Physics .....	36	5	30	Latin .....	72	5	35
		Algebra .....	56	5	40	Physical Geog. ....	18	5	24	Book-keeping ..	14	5	30
B. Di. ....		Geometry .....	36	5	30	Physics .....	86	5	30	Orthography and			
		Arithmetic .....	18	5	30	English .....	90	5	30	Orthography ..	36	5	15
		Gen. History .....	36	5	30	Political Econ..	18	5	20				
		Civics .....	36	5	20	Botany .....	16	5	30				
		Algebra .....	54	5	20	Civics .....	36	5	20	English .....	108	5	20
		Arithmetic .....	18	5	20	Physical Geog. ....	18	5	20	Physiology .....	36	5	20
A. B. ....		Gen. History .....	36	5	20	Physics .....	36	5	20	Political Econ..	36	5	20
B. Di. ....													
		Algebra .....	52	5	30	Civics .....	52	5	30	Political Econ..	34	5	30
		Geometry .....	60	5	30	Physical Geog. ....	32	5	30	Music .....	86	5	30
		Arithmetic .....	52	5	30	Physics .....	88	5	30	Spelling .....	36	5	15
		Gen. History .....	36	5	30	English .....	108	5	30				
		U. S. History .....	36	5	30	Physiology .....	4	5	30				

## HIGH SCHOOL STATISTICS-

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Davis City	J. W. Long .....	10	.....	.....	West'n Nor. Col. H. Park Col....
Dayton ...	Chas. E. Kroesev .....	7	.....	I. S. N. S. 8	.....
	Mae B. Kimple .....	8	S. U. I. 4	.....	.....
Dedham ..	Josephine I. Bruce .....	18	.....	I. S. N. S. sum. t'm	Shenandoah .....
Deep River ..	M. F. Morgan .....	12	Drake .....	.....	.....
Defiance ..	Jas. H. Seymour .....	10	Drake 1 .....	I. S. N. S. 2	Woodbine Nor. ½
Delmar ...	W. E. Rorabough .....	.....	.....	I. S. N. S. 3	.....
De Soto ...	B. M. Cobb .....	12	.....	I. S. N. 8	.....
Dewitt ....	Margaret Buchanan .....	8	.....	.....	.....
	Della Reilley .....	9	.....	.....	U. of Chi. 1 term.
Diagonal ..	L. M. Burgess .....	.....	.....	I. S. N. S. 2	Iowa Bus. Col. ½
Deon .....	Fred A. Beyl .....	11	Franklin Col. 1 ..	.....	Breden Normal 1½
	Lydia Hope .....	10	Ind. U of Chi. 8½	.....	.....
Duncombe ..	I. O. Lovejoy .....	16	Coe Col. 1 .....	I. S. N. S. 1	Humbolt Col. ½
Earlville ..	Guy Ribble .....	12	.....	I. S. N. S. 8	Western Col. ½
Elgin .....	J. H. Williams .....	.....	Grove Cy. Col. 2	Slippery Rock Normal. 8..	.....

## —THREE YEAR COURSES.

Preparation.	Yr's experience in H.S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
B. D.	4	Algebra .....	48	5	30	General Hist. ....	32	5	30	Physical Geog. ....	32	5	30
		Geometry .....	16	5	30	U. S. History .....	32	5	30	Physics .....	32	5	30
		Arithmetic .....	96	5	30	Civics .....	32	5	30	English .....	96	5	30
B. A.	4	Algebra .....	54	5	30	Civics .....	38	5	30	Latin .....	72	5	30
		Geometry .....	36	5	30	Physical Geog. ....	28	5	30				
		Arithmetic .....	18	5	30	Physics .....	20	5	30				
B. D.	6	General Hist. ....	32	5	30	English .....	108	5	30				
		Algebra .....	40	5	30	U. S. History .....	36	5	30	Physics .....	34	5	30
		Arithmetic .....	72	5	30	Civics .....	36	5	30	English .....	108	5	30
B. D.	6	General Hist. ....	96	5	30	Physical Geog. ....	16	5	30	Political Econ. ....	20	5	30
		Algebra .....	54	5	30	Civics .....	18	5	30	Political Econ. ....	18	5	30
		Geometry .....	36	5	30	Physical Geog. ....	18	5	30	Botany .....	18	5	30
B. D.	6	Arithmetic .....	36	5	30	Physics .....	18	5	30	Book-keeping .....	12	5	30
		General Hist. ....	36	5	30	English .....	4	5	30	Latin .....	72	5	30
		U. S. History .....	36	5	30	Physiology .....	18	5	30				
B. D.	2 1/2	Algebra .....	72	5	30	Civics .....	20	5	30	Political Econ. ....	20	5	30
		Arithmetic .....	72	5	30	Physical Geog. ....	36	5	30	Botany .....	16	5	30
		General Hist. ....	16	5	30	Physics .....	36	5	30	Book-keeping .....	16	5	30
B. D.	8	U. S. History .....	56	5	30	English .....	56	5	30				
		Algebra .....	72	5	30	Physics .....	36	5	30	Book-keeping .....	16	5	30
		Geometry .....	36	5	30	English .....	72	5	30	Arithmetic .....	16	5	30
B. D.	8	General Hist. ....	36	5	30	Political Econ. ....	18	5	30				
		U. S. History .....	18	5	30	Latin .....	36	5	30				
		Physical Geog. ....	18	5	30								
B. D.	9	Algebra .....	54	5	30	Civics .....	18	5	30	Physiology .....	18	5	30
		Geometry .....	54	5	30	Physical Geog. ....	12	5	30	Political Econ. ....	18	5	30
		Arithmetic .....	18	5	30	Physics .....	36	5	30				
B. D.	18	General Hist. ....	36	5	30	English .....	108	5	30				
		Algebra .....	54	5	30	Civics .....	18	5	30	Political Econ. ....	18	5	30
		Geometry .....	36	5	30	Physical Geog. ....	18	5	30	Book-keeping .....	18	5	30
B. D.	2	Arithmetic .....	18	5	30	Physics .....	36	5	30	Spelling .....	72	5	30
		General Hist. ....	36	5	30	English .....	94	5	30	Word Analysis .....	72	5	30
		U. S. History .....	18	5	30	Physiology .....	18	5	30	Latin .....	108	5	30
B. D.	2	Algebra .....	96	5	30	Physical Geog. ....	36	5	30	Eag. History .....	18	5	30
		Arithmetic .....	18	5	30	Physics .....	36	5	30	Book-keeping .....	19	5	30
		General Hist. ....	36	5	30	English .....	144	5	30	Drawing .....	16	5	30
A. B., B. D., B. E.	4	U. S. History .....	36	5	30	Physiology .....	36	5	30	Spelling .....	36	5	30
		Civics .....	36	5	30	Political Econ. ....	18	5	30	Pennmanship .....	16	5	30
		Algebra .....	54	5	30	Civics .....	18	5	30	Botany .....	18	5	30
B. D.	1	Geometry .....	36	5	30	Physical Geog. ....	18	5	30	Book-keeping .....	18	5	30
		Arithmetic .....	18	5	30	Physics .....	36	5	30	Latin .....	36	5	30
		General Hist. ....	36	5	30	English Lit. ....	108	5	30				
B. D.	4	U. S. Hist. ....	16	5	30	Political Econ. ....	18	5	30				
		Algebra .....	72	5	30	Physical Geog. ....	24	5	30	Political Econ. ....	18	5	30
		Arithmetic .....	36	5	30	Physics .....	36	5	30	Botany .....	18	5	30
B. D.	1	U. S. History .....	26	5	30	English .....	10	5	30	Book-keeping .....	18	5	30
		Civics .....	18	5	30	Physiology .....	36	5	30	Latin .....	36	5	30
		Algebra .....	54	5	30	U. S. History .....	16	5	30	English .....	66	5	30
B. S., M. E.	4	Geometry .....	44	5	30	Civics .....	16	5	30	Physiology .....	36	5	30
		Arithmetic .....	54	5	30	Physical Geog. ....	16	5	30	Political Econ. ....	16	5	30
		General Hist. ....	36	5	30	Physics .....	16	5	30	Latin .....	36	5	30
B. S., M. E.	4	Algebra .....	54	5	30	U. S. History .....	32	5	30	English .....	180	5	30
		Geometry .....	56	5	30	Civics .....	32	5	30	Physiology .....	36	5	30
		Arithmetic .....	56	5	30	Physical Geog. ....	24	5	30	Political Econ. ....	32	5	30
B. S., M. E.	4	General Hist. ....	36	5	30	Physics .....	32	5	30	Latin .....	36	5	30
		Algebra .....	54	5	30	U. S. History .....	32	5	30	English .....	180	5	30
		Geometry .....	56	5	30	Civics .....	32	5	30	Physiology .....	36	5	30
B. S., M. E.	4	Arithmetic .....	56	5	30	Physical Geog. ....	24	5	30	Political Econ. ....	32	5	30
		General Hist. ....	36	5	30	Physics .....	32	5	30	Latin .....	36	5	30
		Algebra .....	54	5	30	U. S. History .....	32	5	30	English .....	180	5	30
B. S., M. E.	4	Geometry .....	56	5	30	Civics .....	32	5	30	Physiology .....	36	5	30
		Arithmetic .....	56	5	30	Physical Geog. ....	24	5	30	Political Econ. ....	32	5	30
		General Hist. ....	36	5	30	Physics .....	32	5	30	Latin .....	36	5	30

## HIGH SCHOOL STATISTICS

High school.	Names of instructors	Number of periods	Preparation.		
			Year in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Elkport...	Frank R. Johnson.....	20	.....	.....	High. Park Col. 3
Elliott, ..	B. F. Westcoat. ....	6	.....	.....	West. Nor. Col. 3
	Nellie M. Scott. ....	6	.....	I. S. N. S. 2½	High Park Col. ½
Elliston	T. D. Kirkpatrick.....	10	Simpson ¾	.....	.....
Essex .....	M. N. White.....	6	Simpson Col. 4.	.....	Dexter Nor. Col. 1
	Sadie Seablom.....	7	Neb. Univ. 1.	I. S. N. S. 2½	Simpson Acad. 3 S. U. I. Sum. Work West. Nor. Col. 1
Everly ....	F. B. Steece.....	9	Dixon Ill. Col. 1.	I. S. N. S. 1½	Blairtown Sem ¾ Tilford Acad. ½
Fairbank..	A. R. McQueen.....	.....	Iowa Col. 1	I. S. N. S. 6 mo.	Dixon, Ill. 1
Farragut..	O. P. Beale .....	5	Loneboard Col. 5 (Galesburg Ill.)	.....	.....
Fremont...	Charles Young.....	7	S. U. I. 2 Sum. T.	I. S. N. S. 3 terms	Abington Nor. 2 (Ill.)
	Lida Taylor.....	8	Drake 2	.....	.....
Garrison.	E. R. Hutchinson.....	10	S. U. I. 3	.....	.....
Garwin ..	E. M. Wilcox.....	.....	.....	I. S. N. S. 2	.....
Gilman ..	D. A. Tisdale.....	6	.....	I. S. N. S. 2	.....
	L. C. Knupp .....	12	S. U. I. 2	.....	.....

## —THREE YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Y'rs experience in H. S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
B. D.		Algebra .....	72	5 30	U. S. History ..	36	5 30	Physiology .....	36	5 30	Algebra .....	36	5 30
		Geometry or Literature ..	36	5 30	Civics .....	72	5 30	Political Econ..	36	5 30	Geometry .....	36	5 30
		Arithmetic .....	72	5 30	Physical Geog. ..	36	5 30				Arithmetic .....	72	5 30
		General Hist. ....	36	5 30	Physics .....	36	5 30				General Hist. ....	36	5 30
					English .....	108	5 30						
B. D., B. S.	6	Algebra .....	56	5 15	U. S. History ..	36	5 45	English .....	72	5 45	Algebra .....	56	5 15
B. D.	4	Geometry .....	36	5 45	Civics .....	24	5 45	Political Econ.	12	5 45	Geometry .....	36	5 45
		Arithmetic .....	36	5 45	Physical Geog. ..	20	5 45				Arithmetic .....	36	5 45
		General Hist. ....	36	5 45	Physics .....	36	5 45				General Hist. ....	36	5 45
		Algebra .....	36	5 30	Civics .....	36	5 30	Political Econ..	12	5 35	Algebra .....	36	5 30
		Geometry .....	36	5 30	Physical Geog. ..	24	5 35	Reviews .....	36	5 20	Geometry .....	36	5 30
		Arithmetic .....	36	5 30	Physics .....	36	5 30	Latin .....	36	5 25	Arithmetic .....	36	5 30
		General Hist. ....	48	5 30	English .....	72	5 30				General Hist. ....	48	5 30
		U. S. History .....	24	5 30	Physiology .....	12	5 30				U. S. History .....	24	5 30
		Algebra .....	54	5 10	Civics .....	18	5 10	Physics .....	36	5 40	Algebra .....	54	5 10
B. S.	3	Geometry .....	36	5 40	Book-keeping .....	18	5 40	OR			Geometry .....	36	5 40
B. D.	10	Arithmetic .....	18	5 40	OR			Botany .....	18	5 40	Arithmetic .....	18	5 40
		General Hist. ....	36	5 40	Physiology .....	18	5 40	Zoology .....	18	5 40	General Hist. ....	36	5 40
		U. S. History .....	18	5 40	Physical Geog. ..	18	5 40	Latin .....	72	5 40	U. S. History .....	18	5 40
		English .....	108	5 40							English .....	108	5 40
		Political Econ..	18	5 40							Political Econ..	18	5 40
		Algebra .....	36	5 45	Civics .....	30	5 35	Music .....	72	5 25	Algebra .....	36	5 45
		Geometry .....	36	5 40	Physical Geog. ..	18	5 25	Spelling .....	5	5 30	Geometry .....	36	5 40
		Arithmetic .....	18	5 40	English .....	108	5 40	Reviews .....	10	5 30	Arithmetic .....	18	5 40
		Gen. History .....	54	5 25	Physiology .....	24	5 35				Gen. History .....	54	5 25
		U. S. History .....	16	5 30	Political Econ..	18	5 40				U. S. History .....	16	5 30
		Algebra .....	36	5 30	Civics .....	48	5 20	Political Econ..	24	5 20	Algebra .....	36	5 30
		Geometry .....	36	5 30	Physical Geog. ..	36	5 20	Botany .....	18	5 20	Geometry .....	36	5 30
		Arithmetic .....	36	5 30	Physics .....	18	5 20	Com'l Law ..	24	5 20	Arithmetic .....	36	5 30
		Gen. History .....	36	5 30	English .....	108	5 20	Book-keeping ..	12	5 20	Gen. History .....	36	5 30
		U. S. History .....	36	5 20	Physiology .....	36	5 20				U. S. History .....	36	5 20
M. S.	10	Algebra .....	54	5 30	Civics .....	36	5 30	Political Econ..	15	5 30	Algebra .....	54	5 30
		Geometry .....	72	5 45	Physical Geog. ..	18	5 45	Botany .....	18	4 30	Geometry .....	72	5 45
		Arithmetic .....	72	5 30	Physics .....	36	5 35	Latin .....	108	5 30	Arithmetic .....	72	5 30
		Gen. History .....	72	5 30	English .....	126	5 30				Gen. History .....	72	5 30
		U. S. History .....	36	5 30	Physiology .....	36	5 30				U. S. History .....	36	5 30
		Algebra .....	48	5 40	U. S. History .....	16	5 40	English .....	92	4 40	Algebra .....	48	5 40
		Geometry .....	32	5 40	Civics .....	18	5 30	Physiology .....	16	5 40	Geometry .....	32	5 40
		Arithmetic .....	16	5 40	Physical Geog. ..	6	5 35	Book-keeping ..	16	4 40	Arithmetic .....	16	5 40
		Gen. History .....	32	5 40	Physics .....	32	5 40	Latin .....	64	5 40	Gen. History .....	32	5 40
Ph. B.		Algebra .....	36	5 40	Physical Geog. ..	18	5 30	Latin .....	108	5 30	Algebra .....	36	5 40
		Geometry .....	54	5 10	Physics .....	36	5 40				Geometry .....	54	5 10
		Arithmetic .....	36	5 40	English .....	104	5 40	Zoology .....	18	5 30	Arithmetic .....	36	5 40
		Gen. History .....	36	5 40	Physiology .....	18	5 30	Botany .....	18	5 30	Gen. History .....	36	5 40
		U. S. History .....	18	5 40	Political Econ..	18	5 30				U. S. History .....	18	5 40
		Civics .....	18	5 30							Civics .....	18	5 30
B. D.	1	Algebra .....	48	5 35	U. S. History .....	24	5 35	English .....	60	5 35	Algebra .....	48	5 35
		Geometry .....	36	5 35	Civics .....	15	5 35	Latin .....	108	5 35	Geometry .....	36	5 35
		Arithmetic .....	24	5 35	Physical Geog. ..	24	5 35				Arithmetic .....	24	5 35
		Gen. History .....	54	5 35	Physics .....	14	5 35				Gen. History .....	54	5 35
		Algebra .....	54	5 25	Civics .....	18	5 25	Physiology .....	12	5 25	Algebra .....	54	5 25
B. S.	2	Arithmetic .....	30	5 25	Physical Geog. ..	14	5 25	Political Econ..	10	5 25	Arithmetic .....	30	5 25
		General Hist. ....	36	5 25	Physics .....	36	5 25				General Hist. ....	36	5 25
		U. S. History .....	18	5 25	English .....	174	5 25				U. S. History .....	18	5 25

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number rec. period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Grastinger	F. H. Dawson .....	16	Upper Iowa U. 2	I. S. N. S. 8 .....	
Gray .....	A. J. Albin .....	9	Drake 2 Sum T. ....		Western N. 1 Sum
Greeley ..	Hugh A. Curran .....	12	Upper Iowa U. 4 .....		
Hastings...	A. E. Tipple .....	12	Tabor 2 .....		
Havelock.	Thos. Dunn .....	18	Drake 1 .....		
Hawkeye.	Elford C. Preston .....	12	Western Col. $\frac{3}{4}$ Upper Ia. Uni. $\frac{3}{4}$ .....		
Henderson	R. E. Davenport .....	4			West. Nor. Col. 2
Hopkinton	E. T. Bean .....	9		I. S. N. S. 8 .....	
Hornick ..	W. H. Shipley .....	14	U. of Wis. (1 yr.)	St. Normal Sch. Whitewat'r, Wis. 8 .....	
Ireton .....	Roy F. Hannum .....	6	S. U. I. 8 .....		Morningside 4 .....
	Anna E. Goodall .....				
Irwin .....	Carl S. Missildine .....	13		I. S. N. S. 8 .....	
Jolley .....	Arnold W. Lauer .....	16	S. U. I. 4 .....		

## —THREE YEAR COURSES.

Preparation.	Yr's experience in H. S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
B. D.	8	Algebra.....	40	5	40	U. S. History...	12	5	25	English.....	60	5	30
		Geometry.....	24	5	30	Civics.....	12	5	25	Physiology.....	18	5	30
		Arithmetic.....	13	5	30	Physical Geog....	33	5	20	Political Econ...	12	5	30
		General Hist....	86	5	30	Physics.....	33	5	30				
		Algebra.....	73	5	40	U. S. History...	51	5	40	Physics.....	33	5	30
		Geom.....	73	5	40	Civics.....	14	5	35	English.....	91	5	25
		General Hist....	86	5	45	Physical Geog....	18	5	30	Political Econ...	36	5	30
A. B.	1	Algebra.....	54	5	30	U. S. History...	18	5	30	Physiology.....	18	5	30
		Geometry.....	36	5	30	Civics.....	18	5	30	Botany.....	18	5	30
		Arithmetic.....	18	5	30	Physics.....	33	5	30	Latin.....	72	5	30
		General Hist....	86	5	30	English.....	90	5	33				
	22	Algebra.....	82	5	45	U. S. History...	38	5	33	English.....	144	5	25
		Geometry.....	51	5	25	Civics.....	30	5	45	Latin.....	72	5	27
		Arithmetic.....	12	5	23	Physical Geog....	36	5	25				
		Gen. History...	35	5	25	Physics.....	36	5	25				
		Algebra.....	73	5	30	U. S. History...	35	5	30	English.....	108	5	30
		Geometry.....	34	5	30	Civics.....	12	5	20	Physiology.....	36	5	20
		Arithmetic.....	72	5	30	Physical Geog....	34	5	30	Political Econ...	24	5	25
		Gen. History...	36	5	30	Physics.....	36	5	40				
B. S.	2	Algebra.....	62	5	30	Physical Geog....	16	5	25	Book-keeping...	22	5	30
		Geometry.....	38	5	15	Physics.....	28	5	30	Geography.....	10	5	20
		Arithmetic.....	38	5	13	English.....	36	5	30	Latin.....	62	5	30
		Gen. History...	38	5	30	Physiology.....	16	5	30				
		U. S. History...	19	5	30	Political Econ...	16	5	25				
		Civics.....	38	5	30	Botany.....	10	5	30				
B. S.	4	Algebra.....	51	5	25	Physical Geog....	16	5	25	Physiology.....	16	5	30
		Geometry.....	30	5	40	Physics.....	24	5	25	Political Econ...	24	5	25
		Arithmetic.....	30	5	45	Eng Grammar...	22	5	20	Book-keeping...	16	5	40
		Gen. History...	30	5	40	Rhetoric.....	20	5	40	Latin.....	72	5	35
		U. S. History...	16	5	40	American Lit....	12	5	40				
		Civics.....	30	5	25	English Lit....	12	5	20				
M. D.	1	Algebra.....	86	5	40	Civics.....	14	5	30	Latin.....	72	5	30
		Geometry.....	86	5	40	Physical Geog....	18	5	36				
		Arithmetic.....	86	5	0	English.....	144	5	30				
	2	Algebra.....	48	5	35	Civics.....	24	5	20	Litr'y-Readings	30	2	35
		Geometry.....	36	5	40	Physical Geog....	36	5	35	Botany.....	24	5	40
		Arithmetic.....	24	5	30	Physics.....	36	5	40	Book-keeping...	24	5	30
		Gen. History...	36	5	33	English.....	100	5	40	Geog. Ocho, Rev	8	5	30
		U. S. History...	34	5	40	Political Econ...	24	5	45				
Ph. B.	1/2	Algebra.....	51	5	35	General Hist....	36	5	45	Physics.....	36	5	40
		Geometry.....	36	5	35	Civics.....	16	5	30	English.....	108	5	30
		Arithmetic.....	18	5	35	Physical Geog....	24	5	30				
B. D.	1	Algebra.....	54	5	35	Civics.....	51	5	30	Political Econ...	18	5	35
		Geometry.....	36	5	35	Physical Geog....	18	5	35	Book-keeping...	20	5	35
		Arithmetic.....	18	5	30	Physics.....	36	5	40	Penmanship....	108	5	15
		General Hist....	36	5	40	English.....	108	5	35				
		U. S. History...	16	5	30	Physiology.....	18	5	35				
Ph. B.		Algebra.....	36	5	20	U. S. History...	36	5	35	English.....	48	5	30
		Geometry.....	36	5	30	Civics.....	36	5	20	Botany.....	8	5	15
		Arithmetic.....	36	5	30	Physical Geog....	36	5	15	Book-keeping...	16	5	15
		General Hist....	36	5	20	Physics.....	36	5	30	Latin.....	36	5	30

## HIGH SCHOOL STATISTICS

High school.	Name of instructor.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Kalona...	O. C. Morrison.....	11	Denver U. 2.....	I. S. N. S. 1.....	
Keswick ..	Fred Deming.....	9	Drake 8.....		
Ladora....	Walter S. Mason.....	12		I. S. N. S. 8.....	Westminster Md. Theo. Sem. 1..
Lake View	John R. Slacks.....	12		I. S. N. S. 3.....	
La Porte City....	L. H. Minkel.....	4	S. U. I. 2.....	I. S. N. S. 3.....	
	Margaret McQuilkin .....	7		I. S. N. S. 3.....	
	Mrs. H. B. Lizer.....	4		I. S. N. S. 3.....	
Laroh-wood....	H. B. Metzler.....	11		I. S. N. S. 3.....	
Latimer ..	Rollo E. Newcomb.....	16		I. S. N. S. 3.....	
Lawler....	Daniel Costigan.....	12	Upper Iowa U. 5 .....		
Le Claire..	A. I. Neumann.....	9	Ohio North Univ. ....		Ohio Univ 1.....
Le Grand	C. B. Adair .....	16	Palmer Col part of year.....	I. S. N. S. 1 Sam. T.....	
Lehigh....	E. E. Cavanaugh.....	8	Tobin Col 3.....	I. S. N. S. Sam. T.....	

## —THREE YEAR COURSES.

Preparation.		High School Courses.												
Degrees held.	Yr's experience in H. S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.			
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	
		4	Algebra .....	72	5	5	Physical Geog. ....	18	5	15	Zoology .....	18	5	25
			Geometry .....	54	5	45	Physics .....	56	5	25	Eng. History .....	18	5	25
			Arithmetic .....	18	5	25	English .....	108	5	25	Astronomy .....	18	5	25
			General Hist. ....	36	5	25	Botany .....	18	5	25	Political Econ. ....	18	5	25
			U. S. History .....	36	5	25	Book-keeping .....	18	5	25				
			Civics .....	36	5	25	Latin .....	72	5	25				
B. Ped. ....		1	Algebra .....	48	5	35	Civics .....	18	5	30	Political Econ. ....	16	5	30
			Geometry .....	32	5	35	Physical Geog. ....	16	5	30	Word Analysis .....	16	5	30
			Arithmetic .....	16	5	35	Physics .....	18	5	30	Book-keeping .....	16	5	30
			General Hist. ....	32	5	35	English .....	128	5	30	Latin .....	64	5	35
			Algebra .....	54	5	40	Physical Geog. ....	35	5	30	Book-keeping .....	12	5	30
			Geometry .....	36	5	40	English .....	72	5	30	Latin .....	72	5	30
			General Hist. ....	36	5	30	Political Econ. ....	36	5	30				
			Civics .....	24	5	30	Botany .....	18	5	30				
B. Di. ....		4	Algebra .....	86	5	30	Civics .....	18	5	30	Political Econ. ....	18	5	25
			Geometry .....	36	5	25	Physical Geog. ....	36	5	25	Botany .....	18	5	25
			Arithmetic .....	36	5	25	Physics .....	36	5	25	Book-keeping .....	18	5	25
			Gen. History .....	36	5	25	English .....	90	5	25				
			U. S. History .....	36	5	25	Physiology .....	18	5	30				
M. Di., Ph. B. ....		8	Algebra .....	48	5	45	Physics .....	36	5	45	Physical Geog. ....	18	5	45
M. Di. ....		5	Geometry .....	48	5	45	English .....	108	5	45	Botany .....	18	5	45
B. Di. ....		8	Arithmetic .....	18	5	45	Physiology .....	18	5	45	Book-keeping .....	18	5	45
			Gen. History .....	36	5	45	Latin .....	72	5	45	Reviews .....	18	5	45
			Civics .....	18	5	45								
M. Di. ....		2	Algebra .....	51	5	30	Civics .....	34	5	30	Physiology .....	24	5	30
			Geometry .....	18	5	30	Physical Geog. ....	26	5	30	Political Econ. ....	24	5	30
			Arithmetic .....	36	5	30	Physics .....	36	5	30	Book-keeping .....	12	5	30
			Gen. History .....	36	5	30	English .....	100	5	30				
B. Di. ....		1	Algebra .....	36	5	25	Civics .....	8	5	15	Political Econ. ....	16	5	15
			Geometry .....	33	5	25	Physical Geog. ....	24	4	15	Botany .....	12	4	15
			Arithmetic .....	20	5	25	Physics .....	80	5	20	Zoology .....	12	4	15
			Gen. History .....	36	5	15	English .....	80	4	15				
			U. S. History .....	24	5	15	Physiology .....	24	4	15				
B. Sc. ....		4	Algebra .....	76	5	35	Civics .....	22	5	20	Physiology .....	12	5	25
			Arithmetic .....	38	5	25	Physical Geog. ....	16	5	25	Political Econ. ....	22	5	25
			Gen. History .....	38	5	25	Physics .....	34	5	25	Book-keeping .....	16	5	30
			U. S. History .....	35	5	25	English Lit. ....	124	6	25				
B. S. ....			Algebra .....	64	5	35	Civics .....	18	5	30	Political Econ. ....	18	5	30
			Geometry .....	20	5	30	Physical Geog. ....	18	5	30	Book-keeping .....	18	5	30
			Arithmetic .....	14	5	30	Physics .....	36	5	25	Latin .....	72	5	30
			General Hist. ....	36	5	30	English .....	72	5	30				
			U. S. History .....	18	5	30	Physiology .....	18	5	35				
			Algebra .....	86	5	25	Civics .....	36	5	20	Physiology .....	35	5	30
			Arithmetic .....	64	5	20	Physical Geog. ....	28	5	20	Political Econ. ....	8	5	20
			General Hist. ....	31	5	20	Physics .....	36	5	25				
			U. S. History .....	44	5	20	English .....	125	5	20				
			Algebra .....	72	5	30	U. S. History .....	31	5	20	English .....	108	5	25
			Geometry .....	36	5	40	Civics .....	36	5	30	Physiology .....	20	5	20
			Arithmetic .....	20	5	20	Physical Geog. ....	31	5	25	Political Econ. ....	20	5	30
			General Hist. ....	36	5	30	Physics .....	44	5	30				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Letts.....	Jas. H. Dutton.....	10	Kan. Ag. Col. 1 S. U. I. 2 Sum.	Kan. St. Nor. 1 T I. S. N. S. 1 T.	Bus. Course Hol- ton Uni. 3 mo.. Ladies' Private School Chi.....
	Bessie M. Letts.....	10	.....	.....	.....
Linden....	T. M. Prall.....	6	Dak. Uni. 3 Univ. of Chi. 1.....	I. S. N. S. 4.....	.....
	Berna Bland.....	.....	Drake 4.....	.....	.....
Lineville..	O. H. Hallen.....	7	Iowa State Col. 3	I. S. N. S. ½.....	.....
	Lilyan M. Francy.....	8	.....	I. S. N. S. 3.....	.....
Logan.....	Chas. F. Blodgett.....	3	Iowa Wesleyan 4.	I. S. N. S. 1.....	Ia. Wes. Acad. 2.
	Edith M. Fischer.....	6	.....	I. S. N. S. 2.....	.....
	Edith R. Milliman.....	7	Iowa Col. 4.....	.....	Iowa Col. Acad. 1
	Stella M. O'Reilly.....	8	.....	I. S. N. S. 1 term	Loretto Acad. 4..
Lucas.....	J. W. Miller.....	11	.....	.....	Tilford's Collegi- ate Acad. 3.....
LuVerne..	Ward Hannah.....	12	.....	I. S. N. S. 2.....	.....
	Miss Nolte.....	1	Naperville 2.....	.....	.....
Lynnville.	A. T. Gifford.....	12	.....	I. S. N. S. 2.....	.....
Macedonia	H. L. Caillet.....	8	Drake, S. U. I. sum. sessions...	Nebr. State Nor. (Peru) sum. ses.	.....
	Louise Pashby.....	2	.....	I. S. N. S. 2½.....	.....
Magnolia.	F. F. Stover.....	12	Jewell Col. 2, Els- worth Col. ½.....	.....	.....
Manson .	G. W. Young.....	4	Colby Col. 4.....	.....	.....
	Flora A. Allison.....	6	Iowa Col. 4.....	.....	.....
	Grace E. Gabriel.....	6	S. U. I. 4.....	.....	.....

## —THREE YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Y's experience in H.S.	Branches studied.	Number weeks.	Rate per week.	Rec. period.	Branches studied.	Number weeks.	Rate per week.	Rec. period.	Branches studied.	Number weeks.	Rate per week.	Rec. period.
		Algebra .....	72	5 35	U. S. History .....	18	5 25	Physics .....	80	5 30			
		Arithmetic .....	54	5 35	Civics .....	18	5 25	English .....	74	5 35			
		General Hist. ....	36	5 30	Physical Geog. ....	18	5 25	Latin .....	74	5 35			
	8												
B. Ped., M. Di.	10	Algebra .....	36	5 30	Civics of U. S. ....	18	5 25	Botany .....	14	5 25			
A. B.	3/4	Geometry .....	36	5 30	Physical Geog. ....	24	5 25	Orthography .....	12	5 25			
		Arithmetic .....	36	5 30	Physics .....	34	5 25	Latin .....	33	5 30			
		General Hist. ....	36	5 30	English .....	9	5 25						
		Civics of Iowa .....	18	4 25	Political Econ. ....	24	5 25						
B. D.	8	Arithmetic .....	54	5 40	Geometry .....	36	5 40	U. S. History .....	36	5 40			
		Geometry .....	18	5 40	General Hist. ....	36	5 40	Physical Geog. ....	18	5 40			
		English .....	90	5 40	Botany .....	14	5 40	Orthography .....	14	5 40			
		Ph. iology .....	18	5 40	Physics .....	3	5 40	Spelling .....	36	5 40			
		Latin .....	72	5 40	Economics .....	18	5 40	German-hip .....	36	5 40			
		Algebra .....	54	5 40	English Lit. ....	36	5 40	Geography .....	36	5 40			
A. M., M. Di.	9	Algebra .....	48	5 35	English .....	48	5 35	Physical Geog. ....	24	5 35			
B. Di.	4	Geometry .....	60	5 35	Physiology .....	12	5 35	Eng. Grammar .....	24	5 35			
A. B.	2	Arithmetic .....	2	5 35	Political Econ. ....	12	5 35	Eng. Comp. ....	12	5 35			
	1 1/2	General Hist. ....	40	5 35				Book-keeping .....	12	5 35			
		U. S. History .....	12	5 35	Latin .....	108	5 35	Physics .....	36	5 35			
		Civics .....	12	5 35									
		Algebra .....	40	6 1	Civics .....	24	5 30	Physiology .....	24	4 30			
	9	Geometry .....	34	5 30	Physical Geog. ....	12	5 30	Political Econ. ....	12	5 30			
		Arithmetic .....	34	5 30	Physics .....	34	5 30	Botany .....	12	5 30			
		General Hist. ....	36	5 30	English .....	72	4 30	Latin .....	108	5 30			
B. Di.	1	Algebra .....	48	5 30	U. S. History .....	16	5 30	English .....	104	5 25			
		Geometry .....	36	5 30	Civics .....	20	5 30	Physiology .....	24	5 30			
		Arithmetic .....	36	5 30	Physical Geog. ....	16	5 25	Political Econ. ....	18	5 30			
		General Hist. ....	3	5 30	Physics .....	20	5 30	Botany .....	18	5 30			
B. Di.	5	Algebra .....	48	5 30	English .....	72	5 30	Book-keeping .....	12	5 30			
		Geometry .....	36	5 30	Political Econ. ....	12	5 30						
		Arithmetic .....	24	5 30				Astronomy .....	24	5 20			
		General Hist. ....	36	5 30	Latin .....	84	5 30						
		Physics .....	36	5 30	German .....	36	5 20						
		Algebra .....	54	6 40	U. S. History .....	12	5 40	English .....	96	5 40			
		Geometry .....	8	5 40	Civics .....	16	5 40	Physiology .....	20	5 40			
	5	Arithmetic .....	16	5 40	Physical Geog. ....	30	5 40	Book-keeping .....	16	5 40			
	3	General Hist. ....	36	5 40	Physics .....	34	5 40	Latin .....	72	5 40			
		Algebra .....	36	5 40	Civics .....	24	5 40	Physiology .....	24	5 40			
		Arithmetic .....	6	5 40	Physical Geog. ....	24	5 40	Political Econ. ....	12	5 40			
		General Hist. ....	36	4 30	Physics .....	36	5 40						
		U. S. History .....	72	4 30	English .....	72	5 40						
M. A.		Algebra .....	54	5 40	Physics .....	36	5 30						
A. B.	5	Geometry .....	54	5 20	English .....	108	5 30	Geology .....	18	5 30			
A. B.	1	Arithmetic .....	54	5 30	Physiology .....	18	5 30	Botany .....	18	5 30			
		Gen. History .....	14	5 30	Political Econ. ....	18	5 30	Book-keeping .....	18	5 30			
		Civics .....	36	5 30									
		Physical Geog. ....	18	5 30	Latin .....	108	5 30						

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Marble Rock....	L. E. Eickilberg.....	12	Mt. Vernon 4.....		Cornell Normal Course 1.....
Marne ....	Warren L. Rankin.....	12	S. U. I. 2.....		Drake Sum. Sch 6 weeks.....
Massena ..	Royal J. Smalley.....	8	Cornell Col. 4.....		Cornell Col. A. 1..
Maurice...	A. Van Wechel .....	11	Hope Col. 1.....		Northwestern Classical A. 4..
Maxwell...	O. W. Kirk.....	8	H. P. Col. 3 $\frac{1}{4}$ ..		
	Bessie Knapp.....	8	H. P. Col. 1 $\frac{1}{2}$ .....		
Maynard..	Artel B. Ward .....	13	S. U. I. 2.....		
			Drake 4.....		
Mechanics.....ville..	Geo. F. Failor.....	6	Iowa Col. 2.....	I. S. N. S. 1 Sum...	
	Katharine Crim .....	8	Cornell 4.....		
Melbourne	U. G. Brown.....	12			H. P. Col 2.....
Menlo .....	James Lawrey .....	10			Valparaiso Ind. 1 $\frac{1}{2}$
Milford...	F. T. Tompkins.....	7		I. S. N. S. 2.....	
	May Chase .....	8		I. S. N. S. $\frac{1}{2}$ .....	

## —THREE YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yrs experience in H.S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
B. S. ....	4	Algebra .....	54	5 30	Civics .....	24	5 30	Political Econ. ....	24	5 25			
		Geometry .....	36	5 30	Physical Geog. ....	26	5 30	Botany .....	12	5 25			
		Arithmetic .....	36	5 30	Physics .....	36	5 30	Book-keeping .....	16	5 30			
		Gen. History .....	36	5 30	English .....	34	5 25	Latin .....	30	5 25			
		U. S. History .....	12	5 30	Physiology .....	5	5 14						
.....	8	Algebra .....	54	5 25	Civics .....	18	5 25	Botany .....	18	5 25			
		Geometry .....	36	5 25	Physical Geog. ....	18	5 25	Orthography .....	18	5 25			
		Arithmetic .....	18	5 25	Physics .....	36	5 25	Music .....	18	5 25			
		Gen. History .....	36	5 25	English .....	30	5 25	Latin .....	30	5 25			
		U. S. History .....	36	5 25	Physiology .....	18	5 25						
A. B. ....	.....	Algebra .....	56	5 35	Physical Geog. ....	20	5 35	Botany .....	20	5 35			
		Arithmetic .....	36	5 35	Physics .....	36	5 35	Book-keeping .....	20	5 35			
		Gen. History .....	36	5 35	English .....	112	5 35	Latin .....	72	5 35			
		U. S. History .....	16	5 35	Physiology .....	16	5 35						
		Civics .....	20	5 35	Political Econ. ....	12	5 35						
.....	4	Algebra .....	48	5 20	Civics .....	48	5 20	Political Econ. ....	12	5 20			
		Arithmetic .....	72	5 20	Physics .....	24	5 20	Latin .....	12	5 20			
		Gen. History .....	12	4 20	English .....	72	5 20						
		U. S. History .....	48	4 20	Physiology .....	12	4 20						
.....	6	Algebra .....	36	5 45	Gen. History .....	36	5 45	English .....	108	5 40			
		Geometry .....	36	5 45	U. S. History .....	72	5 45	Political Econ. ....	36	5 40			
		Arithmetic .....	36	5 45	Civics .....	36	5 40						
A. B. ....	.....	Algebra .....	54	5 30	Civics .....	36	5 30	Physiology .....	18	5 30			
		Arithmetic .....	36	5 30	Physical Geog. ....	18	5 30	Political Econ. ....	18	5 30			
		Gen. Hist. ....	36	5 30	Physics .....	36	5 30	Latin .....	36	5 30			
		U. S. Hist. ....	18	5 30	English .....	120	5 30						
.....	7	Algebra .....	54	5 25	Physics .....	36	5 35	Political Econ. ....	18	5 35			
		Geom. ....	36	5 40	Eng. Grammar .....	14	5 35	Botany .....	18	5 35			
B. A. ....	8	Arithmetic .....	18	5 35	Eng. Comp. ....	86	5 35	Bookkeeping .....	18	5 40			
		Gen. Hist. ....	36	5 40	Rhetoric .....	36	5 35	Latin .....	72	5 40			
		U. S. Hist. ....	18	5 35	American Lit. ....	18	5 35						
		Civics .....	36	5 35	English Lit. ....	18	5 35						
		Physical Geog. ....	18	5 30	Physiology .....	18	5 35						
.....	9	Algebra .....	42	5 30	Civics .....	24	5 20	Botany .....	18	5 30			
		Geometry .....	36	5 30	Physical Geog. ....	27	5 20	Bookkeeping .....	12	5 20			
		Arithmetic .....	18	5 30	English .....	72	5 20	Writing .....	36	5 15			
		Gen. Hist. ....	36	5 30	Physiology .....	18	5 20	Spelling .....	108	5 15			
		U. S. Hist. ....	12	5 20	Political Econ. ....	27	5 20						
.....	21	Algebra .....	36	5 30	Civics .....	16	5 30	Political Econ. ....	20	5 35			
		Geom. ....	36	5 30	Physical Geog. ....	20	5 30	Spelling .....	36	5 10			
		Arithmetic .....	48	5 30	Physics .....	24	5 35	German .....	72	5 40			
		Gen. Hist. ....	36	5 40	English .....	112	5 35						
		U. S. Hist. ....	36	5 20	Physiology .....	20	5 30						
.....	4	Algebra .....	60	5 30	Physical Geog. ....	24	5 30	Bookkeeping .....	16	5 30			
	5-9	Geometry .....	36	5 35	Physics .....	28	5 25	Pennmanship .....					
		Arithmetic .....	24	5 25	English .....	60	5 30	Music .....					
		Gen. Hist. ....	36	5 30	Physiology .....	16	5 25	Word Anal. and .....					
		U. S. Hist. ....	24	5 25	Political Econ. ....	16	5 30	Orthography .....	40				
		Civics .....	24	5 30	Botany .....	12	5 30						

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Mitchell...	Walter S. Rodgers.....	9	Univ. Min. 5.....		
	Gertrude Williams.....	13	Chas. Cy. Col. ½		
Monmouth	E. R. Stoddard.....	10		I. S. N. S. 1.....	North. Ill. Nor 2.
	Anna Belcher.....	10			
	Elsie Trimble.....	9		I. S. N. S. 1.....	
Monroe....	J. F. Eakins.....	5	Drake 2.....	I. S. N. S. ½.....	So. Iowa Nor. 1..
	Jessie M. Place.....	7	Drake 4.....		
	Jennie French.....	1		I. S. N. S. 1.....	
Moorhead.	Ernest Her.....	10			West Nor. Col. 1.
Montrose.	G. W. Kennedy.....	13			
Moravia..	F. B. Marksbury.....	8	Mo. Univ 1.....	Kirkville State Nor. 2 terms.....	
McIntire..	J. O. Ralph.....	14		I. S. N. S. 8.....	Denison Nor. 1..
New Hartford	Mary B. Granger.....	9	Cornell (Grad.)..		
	Harry L. Ellis.....	7		I. S. N. S. 4.....	Bus. Col. 2.....
New London..	C. D. McClain.....	7	I. W. U. 4.....	I. S. N. S. 4 terms.	Parsons Col Acad-amy 2..
	Katherine Lundgren.....	8	I. W. U. 4.....		Thomas Nor. Tr. school 2
	Fanny F. Reherd (Sp. Mus.)				Genesee Col. Inst.....
New Virginia	Eldon E. Baker.....	16	Simpson Col. 2...		Dexter Nor. 1....
Nichols...	O. W. Bangs.....	10		I. S. N. S. 3.....	
Norway..	W. S. Yeager.....	10		I. S. N. S. 3.....	
	Grace Foster.....	9	Univ. of Minn. 1 Carleton Col. 1		

## —THREE YEAR COURSES.

Preparation.	Degrees held.	Yr's experience in H.S.	High School Courses.											
			Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
B. S.		3	Algebra .....	46	5 35		Civics .....	26	5 30		Botany .....	10	5 35	
			Geom. ....	34	5 15		Physical Geog. ....	30	5 30		Com'l Law .....	10	5 35	
			Arithmetic .....	26	5 40		Physics .....	30	5 30		Book-keeping .....	26	5 35	
			Gen. History .....	26	5 30		English .....	8	5 30		Word Analysis .....	26	5 35	
			U. S. History .....	26	5 30		Physiology .....	10	5 30					
		6	Algebra .....	42	5 25		U. S. History .....	8	5 2		English .....	80	5 25	
			Geometry .....	28	5 25		Civics .....	20	5 25		Physiology .....	12	5 25	
		1	Arithmetic .....	36	5 3		Physical Geog. ....	32	5 30		Political Econ. ....	20	5 15	
			Gen. History .....	64	5 25		Physics .....	82	5 30		Book-keeping .....	20	5 30	
		4	Algebra .....	48	5 40		Civics of Iowa .....	10	5 40		Physiology .....	16	5 40	
		1	Geometry .....	32	5 40		Civics of U. S. ....	16	5 40		Book-keeping .....	16	5 40	
			Arithmetic .....	32	5 40		Physical Geog. ....	16	5 40		Latin .....	64	5 40	
			Gen. History .....	32	5 40		English .....	128	5 40					
M. A.														
B. S.		1	Algebra .....	60	5 25		Civics .....	14	5 25		Political Econ. ....	24	5 25	
			Geometry .....	36	5 25		Physical Geog. ....	36	5 25		Latin .....	60	5 25	
			Arithmetic .....	24	5 25		Physics .....	28	5 25					
			Gen. History .....	24	5 25		English .....	80	5 25					
			U. S. History .....	12	5 25		Physiology .....	8	5 25					
		4	Algebra .....	64	5 25		U. S. History .....	32	5 25		English .....	128	5 25	
			Geometry .....	32	5 25		Civics .....	16	5 25		Physiology .....	20	5 20	
			Arithmetic .....	64	5 25		Physical Geog. ....	16	5 25		Political Econ. ....	16	5 25	
			Gen. History .....	64	5 25		Physics .....	16	5 25		Latin .....	64	5 25	
		8	Algebra .....	32	5 40		Physics .....	32	5 40		Anc. History .....	32	5 40	
			Geometry .....	32	5 40		English .....	128	5 40		Reviews .....	32	5 40	
			U. S. History .....	16	5 40		Political Econ. ....	16	5 40		Latin .....	64	5 40	
B. Di.		4	Algebra .....	86	5 35		Civics .....	28	5 35		Physiology .....	6	5 30	
			Geometry .....	36	5 35		Physical Geog. ....	36	5 35		Political Econ. ....	24	5 35	
			Arithmetic .....	36	5 30		Physics .....	86	5 30					
			U. S. History .....	16	5 25		English .....	78	5 35					
			Algebra .....	36	5 35		Civics .....	36	5 30		Botany .....	18	5 30	
			Geometry .....	36	5 30		Physical Geog. ....	18	5 30		Spelling .....	36		
		1½	Arithmetic .....	36	5 30		Physics .....	36	5 30		Mus. ....	18	3 15	
			General Hist. ....	36	5 30		English .....	162	5 30		Latin .....	108	5 30	
			U. S. History .....	36	5 30		Physiology .....	18	5 30					
			Algebra .....	36	5 35		U. S. History .....	36	5 35		English .....	108	5 35	
			Geometry .....	24	5 40		Civics .....	34	5 35		Physiology .....	10	5 35	
B. A.		5	Arithmetic .....	36	5 35		Physical Geog. ....	36	5 40		Latin .....	108	5 40	
B. L.		2	General Hist. ....	36	5 40		Physics .....	36	5 40					
		6	Algebra .....	80	5 25		Civics .....	24	5 30		Physiology .....	85	5 15	
			Arithmetic .....	36	5 20		Physical Geog. ....	24	5 30		Political Econ. ....	12	5 20	
			Gen. History .....	48	5 25		Physics .....	16	5 30					
			U. S. History .....	56	5 30		English .....	108	5 25					
B. Di.			Algebra .....	54	5 30		U. S. History .....	1*	5 30		English .....	72	5 30	
			Geometry .....	36	5 40		Civics .....	1*	5 25		Political Econ. ....	18	5 30	
			Arithmetic .....	1*	5 30		Physical Geog. ....	1*	5 25		Latin .....	72	5 30	
			Gen. History .....	34	5 30		Physics .....	85	5 30					
B. Di.		2	Algebra .....	36	5 30		Civics .....	36	5 30		Botany .....	18	5 30	
			Geometry .....	34	5 15		Physical Geog. ....	21	5 30		Book-keeping .....	19	5 30	
			Arithmetic .....	36	5 30		Physics .....	18	5 30		Pennmanship .....	36	4 30	
			Gen. History .....	34	5 30		English .....	144	5 30		Spelling .....	36	4 15	
			U. S. History .....	36	2 30		Physiology .....	36	5 30					

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Oakland ..	E. R. Jackson.....	6	Tabor C. 1 S. U. I. 8		Tabor Acad. 1 ..
	Carolyn Tobey.....	8	Radcliffe, Harvard		Drake Sum. Sch..
	Gertrude Barnard.....	8			
Ocheyedan	J. R. Wilson.....	8	Chi. Uni. 1 term..	I. S. N. S. 2 ..	
	Elisabeth Lawberly.....	8		I. S. N. S. 2 ..	
Onslow ...	Hugh Mossman.....	12	Cornell Col. 2 ..		Tilford Colligate Acad. 2 ..
Orient.....	Thos. B. Roman.....	10		I. S. N. S. 1 term..	
Oto.....	M. R. Powers .....	12			
Oxford....	John Castelo .....	10			Valpariso ½ East- ern Ill. Nor. 1. Metropolitan Bus. Col. (Chi) ½.....
Paton.....	E. L. McConkie.....	12	Cornell Col. 2 ..	I. S. N. S. 2 ..	
Pierson ...	James Daughton.....	12		I. S. N. S. 2 ..	Westra Nor. Sum Drake S. H. P. S.
Plainfield.	L. Scott Baker .....	22			West Nor Col. 2 ..
Plover or Powhatan Twp....	D. H. Rummel.. ..	14	Cornel Col. ½ ..	I. S. N. S. 2 ..	Cornell Acad. ½ ..
Pocahon- tas.....	J. J. Rae.....	7	Drake 4.....		
	Genevieve Murphy.....	7	S. U. I. 4.....		

## —THREE YEAR COURSES.

Preparation.	Degrees held.	Yr experience in H. S.	High School Courses.											
			Branches studied	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied	Number weeks.	Rec. per week.	Rec. periods.
B. S. ....		5	Algebra .....	54	5	40	English .....	108	5	40	Zoology .....	18	5	40
A. B. ....		7	Geometry .....	86	5	40	Physiology .....	18	5	10	Botany .....	18	5	40
.....			Gen. History .....	86	5	40	.....				Electives—			
.....			U. S. History .....	18	5	40	Latin .....	72	5	40	Arithmetic .....	18	5	40
.....			Civics .....	18	5	40	Com. Law .....	18	5	40	Political Econ .....	18	5	40
.....			Physical Geog .....	18	5	40	Book-keeping .....	18	5	40	Cicero .....	86	5	40
.....			Physics .....	86	5	40	.....				.....			
B. D. ....		6	Algebra .....	48	5	24	U. S. History .....	36	5	20	English .....	84	5	20
B. D. ....			Geometry .....	86	5	25	Civics .....	18	5	20	Physiology .....	24	5	20
.....			Arithmetic .....	86	5	25	Physical Geog .....	12	5	25	.....			
.....			Gen. History .....	86	5	25	Physics .....	86	5	25	.....			
.....			Algebra .....	50	5	25	Civics .....	28	5	25	Political Econ .....	22	5	25
.....			Geometry .....	58	5	25	Physical Geog .....	14	5	25	Mental Arith .....	10	5	25
.....			Arithmetic .....	9	5	25	Physics .....	9	5	25	Latin .....	72	5	25
.....			General Hist .....	86	5	25	English .....	72	5	25	.....			
.....			U. S. History .....	9	5	25	Physiology .....	.....			.....			
.....		4	Algebra .....	86	5	30	U. S. History .....	12	5	25	English .....	106	5	30
.....			Geometry .....	86	5	30	Civics .....	24	5	25	Physiology .....	24	5	25
.....			Arithmetic .....	86	5	25	Physical Geog .....	86	5	30	Political Econ .....	86	5	25
.....			General Hist .....	86	5	25	Physics .....	86	5	25	.....			
.....			Algebra .....	52	5	25	U. S. History .....	18	5	25	English .....	126	5	25
.....			Geometry .....	82	5	25	Civics .....	18	5	25	Physiology .....	4	5	25
.....			Arithmetic .....	86	5	30	Physical Geog .....	18	5	25	Political Econ .....	18	5	25
.....			General Hist .....	86	5	30	Physics .....	86	5	25	Botany .....	18	5	25
.....			Algebra .....	86	5	25	Civics .....	16	5	25	Political Econ .....	24	5	25
.....			Geometry .....	86	5	25	Physical Geog .....	16	5	25	Book-keeping .....	20	5	25
.....			Arithmetic .....	18	5	25	Physics .....	36	5	25	Latin .....	72	5	25
.....			General Hist .....	86	5	25	English .....	92	5	25	.....			
.....			U. S. History .....	20	5	25	Physiology .....	16	5	25	.....			
M. D. ....		1	Algebra .....	86	5	35	Civics .....	18	4	35	Physiology .....	18	5	35
.....			Arithmetic .....	86	5	35	Physical Geog .....	86	4	35	Political Econ .....	8	4	35
.....			General Hist .....	18	5	35	Physics .....	18	5	35	Book-keeping .....	8	5	35
.....			U. S. History .....	86	5	35	English .....	108	4	35	.....			
.....		5	Algebra .....	72	5	30	Civics .....	24	5	20	Political Econ .....	18	5	25
B. D. ....			Geometry .....	86	5	25	Physical Geog .....	36	5	15	Botany .....	18	5	25
.....			Arithmetic .....	48	5	18	Physics .....	86	5	30	Word Analysis .....	18	5	25
.....			General Hist .....	86	5	30	English .....	126	5	25	Book-keeping .....	14	5	25
.....			U. S. History .....	48	5	24	Physiology .....	14	5	15	Latin .....	72	5	30
B. S. ....		2	Algebra .....	72	5	30	U. S. History .....	86	5	30	English .....	106	5	25
.....			Geometry .....	72	5	30	Civics .....	52	5	25	Book-keeping .....	26	5	30
.....			Arithmetic .....	72	5	25	Physical Geog .....	86	5	25	Latin Begin .....	86	5	30
.....			General Hist .....	86	5	25	Physics .....	36	5	30	.....			
.....			Algebra .....	54	5	20	U. S. History .....	18	5	20	English .....	106	5	30
B. D., M. D. ....		1½	Geometry .....	36	5	25	Civics .....	96	5	15	Political Econ .....	18	5	30
.....			Arithmetic .....	18	5	20	Physical Geog .....	18	5	20	.....			
.....			General Hist .....	36	5	20	Physics .....	36	5	20	.....			
M. D. ....		5	Algebra .....	54	5	40	Civics .....	27	5	40	Political Econ .....	18	5	40
A. B. ....			Geometry .....	36	5	40	Physical Geog .....	18	5	40	Review .....	18	5	40
.....			Arithmetic .....	18	5	40	Physics .....	86	5	45	Latin .....	108	5	40
.....			General Hist .....	86	5	40	English .....	108	5	40	.....			

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Pomeroy	D. Patten .....	6	.....	I. S. N. S. 4 .....	Cedar Val. Sem. 1
	Edna E. Black .....	7	.....	I. S. N. S. 4 .....	
	Mabel Hoy .....	4	.....		Morningside Col. 2
Prescott	J. A. Griffith .....	12	Vincennes Univ (Ind.) 3 .....		
Preston	W. T. De Mar .....	14	Drake 5 terms .....		So. Ia. Nor. and Scientific Inst. (Bloomfield) 4...
Pulaski	W. H. Russell .....	8	Drake Uni. ¼ .....		Southern Iowa Normal 1 .....
Radcliffe	LeRoy Anderson .....	8	Morningside Col. 2 .....		
	O. J. Johnson .....	8	Jewell Lutheran Col. 1 .....		High Park Col. ½
Redding	W. S. Stanton .....	16	Amity Col. 4 .....		
Redfield	E. J. Pollock .....	7	Tarkio Col. 1 .....		High Park Col. 2.
	L. Blanche Chaney .....	8	.....	I. S. N. S. ¼ .....	High Park Col. 1.
Remsen	John Hayes .....	8	Col. Communal Boulogne, France 1½ .....	I. S. N. S. 1 term .....	
Ripley	H. A. Glackemyer .....	12	Avalon Col. 5 .....	I. S. N. S. 1 .....	
Riverside	H. L. Bryson .....	10	S. U. I. 3½ .....		
St. Charles	A. H. Anton .....	12	Drake 1 .....		
Soranton	K. G. Lancelot .....	6	.....		
	Grace Kane .....	6	.....	I. S. N. S. .....	

## —THREE YEAR COURSES.

Preparation.	Yrs experience in H.S.	High School Courses.											
		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
M. D.	3	Algebra	54	5	35	Physics	3	5	35	Latin	106	5	85
M. D.	3	Geometry	54	5	35	English	106	5	35				
	3	Arithmetic	54	5	35	Physiology	17	5	35	Eng. History	18	5	85
	3	General Hist.	8	5	35	Political Econ.	17	5	35	Economics	18	5	85
	3	U. S. History	18	5	35	Botany	17	5	35	Zoology	18	5	85
	3	Civics	18	5	35	Geology	17	5	35	Literature	96	5	35
	3	Physical Geog.	18	5	35								
	7	Algebra	72	5	25	Civics	24	5	20	Botany	17	5	80
	7	Geometry	36	5	25	Physical Geog.	24	5	20	Eng. Hist.	2	5	80
	7	Arithmetic	7	5	25	English	106	5	35	Orthography	17	5	15
	7	General Hist.	36	5	25	Physiology	17	5	30				
	7	U. S. History	12	5	25	Political Econ.	36	5	20				
		Algebra	54	5	5	Physical Geog.	17	5	25	Political Econ.	16	5	20
		Geometry	96	5	25	Physics	37	5	25	Book-keeping	12	5	25
B. D., B. S., B.		General Hist.	36	5	25	English	50	5	5	Latin	72	5	35
Accts.		Civics	86	5	20	Physiology	18	5	2				
B. D.	2	Algebra	64	5	30	U. S. History	48	5	30	English	96	5	30
	2	Arithmetic	48	5	30	Civics	61	5	30	Physiology	48	5	25
	2	Gen. History	40	5	30	Physical Geog.	48	5	25				
	4	Algebra	54	5	35	Civics	17	5	35	Political Econ.	18	5	35
	4	Geometry	36	5	35	Physical Geog.	18	5	35	Botany	18	5	35
	4	Arithmetic	18	5	35	Physics	87	5	35	Latin	72	5	35
	4	Gen. History	36	5	35	English	06	5	35				
	4	U. S. History	18	5	35	Physiology	17	5	35				
A. B.		Algebra	82	5	30	U. S. History	64	5	30	Physiology	24	5	30
		Arithmetic	32	5	30	Physical Geog.	24	5	30	Political Econ.	24	5	30
		Gen. History	82	5	30	English	76	5	30				
B. D.	3	Algebra	36	5	40	U. S. History	2	5	30	Botany	12	5	40
	3	Geometry	36	5	30	Physical Geog.	24	5	30	Book-keeping	17	5	40
	3	Arithmetic	36	5	30	Physics	36	5	30	Geology	24	5	30
	3	Gen. History	36	5	30	English	07	5	30				
		Algebra	54	5	45	Physical Geog.	17	5	45	Latin	72	5	45
		Geometry	78	5	45	Physics	36	5	45	German	72	5	45
		Arithmetic	18	5	45	English	106	5	45				
		Gen. History	36	5	45	Physiology	18	5	45				
		Civics	18	5	45								
B. S., M. D.	10	Algebra	54	5	40	Physical Geog.	24	5	25	Astronomy	18	5	35
	10	Geometry	86	5	30	Physics	86	5	30	Book-keeping	12	5	35
	10	Arithmetic	36	5	30	English	153	5	30	Etymology	18	5	35
	10	Gen. History	34	5	25	Physiology	17	5	25	Latin	72	5	30
	10	U. S. History	36	5	25	Political Econ.	18	5	25				
	10	Civics	36	5	25	Botany	18	5	25				
	1	Algebra	36	5	40	U. S. History	86	5	40	English	106	5	40
	1	Geometry	36	5	40	Civics	18	5	40	Physiology	18	5	40
	1	Arithmetic	18	5	40	Physical Geog.	18	5	40	Latin	72	5	40
	1	Gen. History	36	5	40	Physics	86	5	40				
	1	Algebra	60	5	5	Civics	58	5	35	Political Econ.	12	5	35
	1	Geometry	36	5	5	Physical Geog.	18	5	25	Book-keeping	18	5	25
	1	Arithmetic	36	5	25	Physics	86	5	35	Geography	12	5	25
	1	Gen. History	36	5	25	English	72	5	25	Latin	36	5	25
	1	U. S. History	12	5	25	Physiology	12	5	25				
	7	Algebra	54	5	40	Civics	19	5	40	Political Econ.	17	5	40
	7	Geometry	36	5	40	Physical Geog.	18	5	40	Latin	106	5	40
	7	Arithmetic	18	5	40	Physics	86	5	40				
	7	Gen. History	36	5	40	English	153	5	40				
	7	U. S. History	18	5	40	Physiology	18	5	40				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Shannon City..	O. W. Hunt.....	9	High. Park Col. 8		Dexter Acad. $\frac{1}{2}$ ..
	Ethel Higgins.....	4	High. Park Col. 1		
Sheffield...	H. W. Sutter.....	5			High. Park Col. 3
	Maudie Scott.....	7			
Shellsburg	Spencer A. Gulles .....	10	Sum. Work in S. U. I. and Drake..		Cedar Rapids Business Col. 1..
Silver City	C. B. Woodrum .....	10		I. S. N. S. Summer School..	Western Normal.
Smithland	O. W. Bays.....	6			High. Park Col. ..
	May Wright.....				High. Park Col. ..
Solon .....	Amelia McDonnell.....	12	S. U. I. $1\frac{1}{2}$ .....	I. S. N. S. 8.....	
Springdale	Bion H. Culver .....	6	U. of Neb. 6 .....		Bavarian Royal U Munich, Ger. 1
	Mabel J. Buedel.....	9	Parson's Col. 4....	I. S. N. S. 1.....	U. of Chi. 3 sum.
Stanton ...	Chas. E. Hill.....	11		Neb. Nor. 2.....	
S Center..	M. D. Sutton .....	5	Col. of Phy. and Sur., Keokuk 1	I. S. N. S. 2.....	H. P. Nor. Col. 2
	Vida R. Keene.....	5		I. S. N. S. 2.....	
	Bernice E. Laidlaw.....	5			Northwest Conservatory of Music, Minneapolis 2
Steamboat Rock ...	Robt. Morris .....	12	S. U. I. 1.....	I. S. N. S. 2 .....	

## —THREE YEAR COURSES.

Preparations.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.	Number weeks.	Wks. per week.	Rec. period.	Branches studied.	Number weeks.	Wks. per week.	Rec. period.	Branches studied.	Number weeks.	Wks. per week.	Rec. period.
.....	8	Algebra .....	78	5	40	Civics .....	30	5	30	Political Econ..	30	5	40
.....	1	Geometry .....	36	5	45	Physical Geog..	16	5	30	Botany .....	12	5	40
.....		Arithmetic .....	35	5	30	Physics .....	36	5	30	Latin..Begin...	36	5	40
.....		General Hist..	36	5	30	English.....	108	5	30				
.....		U. S. History..	4	5	30	Phys. (Review)..	4	5	30				
B. Di.....	8	Algebra.....	54	5	45	Physical Geog..	15	5	45	Latin.....	72	5	45
.....	8	Geometry .....	34	5	45	Physics .....	36	5	45				
.....		Arithmetic .....	18	5	40	Eng. Grammar..	18	5	40	Word Analysis	36	5	40
.....		General Hist..	36	5	45	Eng. Comp .....	18	5	40	Science.....	18	5	40
.....		U. S. History..	18	5	40	Rhetoric .....	36	5	45	Reviews.....	18	5	40
.....		Civics of Iowa..	6	5	40	American Lit....	18	5	45				
.....		Civics of U. S..	12	5	40	Book-keeping ..	14	5	40				
.....		Algebra .....	54	5	30	Civics .....	36	5	30	Physiology. ....	18	5	30
.....		Arithmetic .....	18	5	30	Physical Geog..	15	5	30	Political Econ..	18	5	30
.....	6	General Hist..	36	5	30	Physics .....	36	5	30				
.....		U. S. History..	36	5	30	English .....	90	5	25				
.....		Algebra .....	40	5	30	Civics .....	24	5	30	Political Econ..	36	5	30
.....	2	Geometry .....	21	5	45	Physical Geog..	30	5	30	Botany .....	12	5	30
.....		Arithmetic .....	32	5	30	Physics .....	20	5	30	Book-keeping ..	18	5	30
.....		General Hist..	36	5	30	English .....	108	5	30				
.....		U. S. History..	12	5	30	Physiology .....	18	5	30				
B. D. ....	5	Algebra .....	71	5	30	Civics .....	20	5	30	Political Econ..	16	5	30
.....	1	Geometry .....	32	5	30	Physical Geog..	21	5	30	Botany.....	24	5	30
.....		Arithmetic .....	32	5	30	Physics .....	39	5	30	Latin.....	72	5	30
.....		General Hist..	34	5	30	English .....	108	5	30				
.....		U. S. History..	32	5	30	Physiology .....	36	5	30				
M. Di.....	1	Algebra .....	54	5	25	General Hist....	54	5	25	Physics .....	36	5	25
.....		Geometry .....	32	5	25	Civics .....	34	5	25	English .....	144	5	25
.....		Arithmetic .....	24	5	25	Physical Geog..	34	5	25	Physiology .....	36	5	25
.....		Algebra .....	54	5	30	English .....	72	5	30	Book-keeping ..	18	5	30
B. S. ....	11	Geometry .....	54	5	30	Political Econ..	18	5	30	Geology .....	18	5	30
M. Di.....	1	General Hist..	36	5	30	Botany.....	15	5	30	Astronomy .....	15	5	30
.....		Civics .....	18	5	30	Latin .....	108	5	30	Am. History....	36	5	30
.....		Physical Geog..	15	5	30								
.....		Physics .....	36	5	30								
.....	5	Algebra .....	64	5	30	Civics.....	20	5	30	Political Econ..	16	5	30
.....		Geometry .....	34	5	30	Physical Geog..	16	5	30	Latin.....	68	5	30
.....		General Hist..	34	5	30	Physics .....	34	5	30				
.....		U. S. History..	12	5	30	English .....	102	5	30				
M. Accts.....	4½	Algebra .....	54	5	40	Physics .....	19	5	40	Latin.....	72	5	40
B. Di.....	1	Geometry .....	36	5	40	English Lit .....	72	5	40	Zoology .....	18	5	40
.....		Arithmetic .....	18	5	40	Physiology .....	15	5	40	Book-keeping ..	18	5	40
.....		General Hist..	36	5	40	Political Econ..	15	5	40	Eng. Literature	18	5	40
.....		U. S. History..	36	5	40	Botany.....	18	5	40	Physics.....	18	5	40
.....	1	Physical Geog..	18	5	40								
.....		Algebra .....	50	5	25	Civics .....	24	5	5	Political Econ..	16	5	25
.....	1	Geometry .....	36	5	25	Physical Geog..	34	5	30	Book-keeping..	20	5	30
.....		Arithmetic .....	36	5	25	Physics .....	37	5	25	Music .....	36	5	25
.....		General Hist..	36	5	25	English .....	92	5	25				
.....		U. S. History..	24	5	20	Physiology .....	20	5	30				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Stacyville.	H. A. Langley.....	16	.....	I. S. N. S. 2 .....	.....
Statford...	J. M. Holaday .....	6	.....	.....	Lebanon O. Nor. 1
Swea City.	C. A. Smith.....	9	.....	I. S. N. S. 2.....	.....
Tabor.....	H. F. Volkmann.....	7	Tabor Col. 5 ....	.....	.....
	Gwendolen Gilliland.....				
Thompson	John Ludwickson.....	12	.....	I. S. N. S. 3.....	Woodbine Nor. 1.
Thornton	J. F. Doderer.....	7	.....	I. S. N. S. 3.....	.....
Thurman.	Myron C. Gaston.. .....	5	Tabor Col. 4 S. U.	.....	.....
	Mrs. Emily Colby Gaston..	7	I. 2 Grad. Col.. Tabor Col. 4 .....		
Tingley ...	Chas. Murray.....	6	Drake 3 .....	.....	Hameston Nor. 1
	Edith Swain .....	6	Chicago Univ. 4 Simpson 1 .....		
Tripoli....	E. S. Baker.....	13	S. U. I. 1 .....	I. S. N. S. 4 .....	.....
	Olara Hazlett .....	12	.....	I. S. N. S. 3 .....	
Urbana ...	C. T. Fisher.....	12	S. U. I 1 .....	.....	Telford Acad. 2..
Vail .....	F. F. Gordon .....	.....	.....	.....	Frem't Neb. Nor. 3
Van Hornie	B. D. Atchley .....	12	.....	I. S. N. S. 3.....	.....

## —THREE YEAR COURSES.

Preparation.	Yr's experience in H.S.	High School Courses.											
		Branches studied.	Number weeks.	R-c per week.	Rec period.	Branches studied.	Number weeks.	R-c per week.	Rec period.	has Banout added.	Number weeks.	R-c per week.	Rec period.
.....	2	Algebra .....	54	5	5	U. S. History .....	18	5	5	English .....	90	5	5
		Geometry .....	36	5	5	Civics .....	18	5	5	Physiology .....	12	5	5
		Arithmetic .....	18	5	5	Physical Geog. ....	18	5	5	Political Econ. ....	18	5	5
		Gen. History .....	56	5	5	Physics .....	74	5	5	Botany .....	18	5	5
.....	24	Algebra .....	56	5	40	U. S. History .....	72	5	40	English .....	96	5	40
		Geometry .....	36	5	40	Civics .....	40	5	40	Physiology .....	36	5	40
		Arithmetic .....	108	5	40	Physical Geog. ....	36	5	40	Political Econ. ....	20	5	40
		Gen. History .....	56	5	40	Physics .....	36	5	40	Book-keeping .....	56	5	40
.....	4	Algebra .....	86	5	25	Gen. History .....	48	5	25	Physical Geog. ....	27	5	25
		Geometry .....	43	5	25	U. S. History .....	31	5	25	Physiology .....	33	5	25
		Arithmetic .....	31	5	25	Civics .....	36	5	25	English .....	84	5	25
		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
A. B. ....	.....	Algebra .....	72	5	45	Physics .....	36	5	45	.....	.....	.....	.....
		Geometry .....	36	5	45	English Lit. ....	108	5	45	Book-keeping .....	36	5	45
		Gen. History .....	55	5	45	Botany .....	18	5	45	Com'l Arith. ....	3	5	45
		Civics .....	18	5	45	.....	.....	.....	.....	.....	.....	.....	.....
B. Di. ....	.....	Physical Geog. ....	18	5	45	Latin .....	72	5	45	.....	.....	.....	.....
		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Algebra .....	44	5	25	U. S. History .....	16	5	25	English .....	100	5	25
		Geometry .....	56	5	25	Civics .....	28	5	25	Physiology .....	16	5	25
B. Di. ....	15	Arithmetic .....	16	5	25	Physical Geog. ....	20	5	25	Political Econ. ....	18	5	25
		Gen. History .....	56	5	25	Physics .....	36	5	25	Botany .....	16	5	25
		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Algebra .....	64	5	25	Civics .....	12	5	25	Political Econ. ....	12	5	20
A. B. A. M. ....	2	Geometry .....	30	5	20	Physical Geog. ....	12	5	15	Botany .....	12	5	20
		Arithmetic .....	33	5	20	Physics .....	36	5	20	Word Analysis .....	20	5	20
		Gen. History .....	52	5	20	English .....	108	5	20	Zoology .....	2	5	20
		U. S. History .....	28	5	20	Physiology .....	36	5	20	.....	.....	.....	.....
A. B. ....	4	Algebra .....	72	5	25	U. S. History .....	108	5	30	Physiology .....	108	5	30
		Geometry .....	56	5	30	Civics .....	36	5	30	Botany .....	18	5	35
		Arithmetic .....	108	5	30	Physics .....	36	5	30	Book-keeping .....	36	5	30
		Gen. History .....	36	5	25	English .....	188	5	30	Latin .....	106	5	35
B. Pd. ....	9	Algebra .....	56	5	36	U. S. Hist. ....	16	5	25	English .....	126	5	35
		Geometry .....	36	5	40	Civics .....	20	5	35	Political Econ. ....	16	5	40
		Arithmetic .....	2	5	35	Physical Geog. ....	2	5	40	Botany .....	2	5	40
		Gen. Hist. ....	36	5	5	Physics .....	36	5	30	Latin .....	72	5	40
B. Di., M. Di. ....	1	Physical Geog. ....	36	5	30	.....	.....	.....	.....	.....	.....	.....	.....
		Algebra .....	54	5	40	Physical Geog. ....	36	5	30	English Lit. ....	18	5	30
		Arithmetic .....	54	5	40	Physics .....	3	5	40	Physiology .....	36	5	30
		Gen. Hist. ....	36	5	40	Eng Grammar .....	36	5	40	Political Econ. ....	18	5	30
.....	14	U. S. Hist. ....	36	5	30	Rhetoric .....	36	5	30	Potany .....	18	5	40
		Civics .....	36	5	30	American Lit. ....	18	5	30	Spelling .....	18	5	20
		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Algebra .....	36	5	40	Physical Geog. ....	18	5	30	Botany .....	18	5	20
B. S. & Pd. B. ....	6	Arithmetic .....	72	5	30	Physics .....	36	5	40	economics .....	18	5	30
		Gen. Hist. ....	56	5	30	English .....	72	5	30	Orthography .....	108	5	15
		U. S. Hist. ....	36	5	30	Physiology .....	36	5	30	Latin .....	36	5	30
		Civics .....	18	5	30	Political Econ. ....	18	5	30	.....	.....	.....	.....
B. Di. ....	.....	Algebra .....	54	5	40	Physical Geog. ....	18	5	40	Bookkeeping .....	18	5	40
		Geometry .....	54	5	40	Physics .....	36	5	40	Latin .....	72	5	40
		Gen. Hist. ....	36	5	40	English .....	108	5	40	.....	.....	.....	.....
		Civics .....	18	5	40	Botany .....	18	5	40	.....	.....	.....	.....
.....	.....	Algebra .....	44	5	25	U. S. Hist. ....	14	5	25	English .....	106	5	30
		Geometry .....	36	5	25	Civics .....	16	5	25	Physiology .....	18	5	30
		Arithmetic .....	36	5	25	Physical Geog. ....	12	5	20	Political Econ. ....	20	5	30
		Gen. Hist. ....	36	5	25	Physics .....	36	5	30	.....	.....	.....	.....

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Van Meter	Ed. R. Monroe.....	18	.....	.....	Dexter, Ia. Nor.
	May Cook .....	2	.....	.....	Valpar., Ind. No.
Van Wert.	F. P. Reed .....	7	Amity College 2 Drake 2 1/4	.....	Stanberry 1/2 Nor.
	Mrs. Annis Craft.....	9	.....	.....	Unl. Ill. 1/2..
Walker ...	A. Bruce Alderman .....	18	.....	I. S. N. S. 3 yr.	.....
Waukeo...	Wm. Shirley.....	18	S. U. I. 1	.....	.....
Wayland..	John E. Evans .....	10	Simpson 4	.....	.....
Weldon...	John A. McIntosh.....	12	Cen. Nor. Unl. 8	I. S. N. S. 1	.....
	Kate Coffey.....	12	.....	I. S. N. S. 1/2	.....
Wesley...	J. H. Westcoat.....	7	.....	.....	Corning Acad 1 W. N. O. 2....
West Bend..	Guy D. Clevenger.....	5	Mt. Merriis Col. 1 (Illinois).....	I. S. N. S. 3	.....
	Ida M. Hoebel .....	7	.....	I. S. N. S. 3	.....
	Effie Weisbard .....	7	.....	I. S. N. S. 2	.....
West Side...	R. D. Barr.....	5	.....	I. S. N. S. 3	.....
	Bess Chase .....	6	.....	I. S. N. S. 2	.....
Wheat-land....	Earl T. Housh.....	8	North. Ill. Col. 2	.....	Sum. sessions Felicity N. Ohio
	Wm. Beckmann.....	7	.....	.....	Lebanon N. Ohio.

## —THREE YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Y'rs experience in H.S.	Branches studied.	Number weeks.	Rec. per week.	Rec. per a. d.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
		Algebra .....	54	5	30	Physical Geog. . .	36	5	30	Botany .....	36	4	30
		Geometry .....	36	5	30	Physics .....	36	5	30	Book-keeping. . .	18	5	30
		Arithmetic .....	18	5	30	English .....	90	5	30	Latin .....	108	5	30
		Gen. History .....	36	5	30	Political Econ. . .	18	5	30				
		Algebra .....	64	5	45	Civics .....	32	5	25	Political Econ. . .	24	5	25
		Geometry .....	32	5	25	Physical Geog. . .	32	5	25	Botany .....	20	5	25
L. L. B. ....	2	Arithmetic .....	20	5	25	Physics .....	32	5	25	Book-keeping. . .	32	4	25
		Gen. History .....	32	5	25	English .....	96	5	25				
		U. S. History .....	20	5	25	Physiology .....	20	5	25				
B. Di. ....	5	Algebra .....	54	5	30	U. S. History .....	36	5	30	English .....	81	5	30
		Geometry .....	36	5	30	Civics .....	18	5	30	Physiology .....	36	5	30
		Arithmetic .....	36	5	30	Physical Geog. . .	18	5	30	Political Econ. . .	18	5	30
		Gen. History .....	36	5	30	Physics .....	36	5	30	Botany .....	18	5	30
		Algebra .....	60	5	30	U. S. History .....	36	5	20	English .....	108	5	15
		Geometry .....	36	5	20	Civics .....	36	5	20	Political Econ. . .	36	5	15
		Arithmetic .....	48	5	30	Physical Geog. . .	36	5	15	Botany .....	20	5	15
		Gen. History .....	52	5	20	Physics .....	36	5	20	Book-keeping. . .	36	5	30
A. B. ....	1	Algebra .....	48	5	25	U. S. History .....	10	5	25	Physics .....	32	5	25
		Arithmetic .....	32	5	25	Civics .....	32	5	25	English .....	112	5	25
		Gen. History .....	32	5	25	Physical Geog. . .	32	5	20	Physiology .....	10	5	20
B. Sc. ....	4	Algebra .....	32	5	30	U. S. History .....	31	5	30	English .....	36	5	30
		Geometry .....	32	5	30	Civics .....	20	5	20	Physiology .....	32	5	20
		Arithmetic .....	32	5	30	Physical Geog. . .	32	5	25	Political Econ. . .	20	5	25
		General Hist. . .	32	5	30	Physics .....	32	5	30	Book-keeping. . .	20	5	30
B. Accts. ....	5	Algebra .....	72	5	35	U. S. History .....	26	5	35	English .....	108	5	40
		Geometry .....	36	5	40	Civics .....	24	5	35	Political Econ. . .	36	5	35
		Arithmetic .....	36	5	40	Physical Geog. . .	18	5	35	Botany .....	18	5	35
		General Hist. . .	36	5	35	Physics .....	36	5	35	Latin .....	72	5	35
		Algebra .....	54	5	40	English .....	70	5	40				
		Geometry .....	36	5	40	Botany .....	18	5	40	Physiography. . .	18	5	40
		Arithmetic .....	18	5	40	Zoology .....	18	5	40	Physiology .....	18	5	40
B. Di. ....	4	General Hist. . .	36	5	40					Political Econ. . .	18	5	40
B. Di. ....	1	U. S. History .....	18	5	40	Latin .....	72	5	40	Book-keeping. . .	18	5	40
		Civics .....	18	5	40	Eng. Classics .....	62	5	40				
B. Di., M. Di. . .	3	Algebra .....	44	5	40	Physical Geog. . .	18	5	30	Latin .....	28	5	35
B. Di. ....		Geometry .....	36	5	35	Physics .....	36	5	35	Word Analysis. . .	18	5	30
		Arithmetic .....	28	5	40	English .....	100	5	35	Book-keeping. . .	18	5	40
		General Hist. . .	31	5	30	Physiology .....	12	5	30				
		U. S. History .....	18	5	35	Political Econ. . .	12	5	30				
		Civics .....	18	5	35								
		Algebra .....	52	5	45	Civics .....	36	5	30	Political Econ. . .	8	5	40
		Geometry .....	20	5	40	Physical Geog. . .	20	5	35	Botany .....	16	5	35
		Arithmetic .....	64	5	30	Physics .....	31	5	40	Book-keeping. . .	28	5	40
		Gen. History .....	36	5	35	English .....	132	5	30	Zoology .....	20	5	35
		U. S. History .....	20	5	30	Physiology .....	20	5	35	Geology .....	16	5	30

## HIGH SCHOOL STATISTICS

High school.	Names of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Whittimore....	A. O. Joy.....	1	.....	I. S. N. S. 4.....	.....
Wiota....	4. F. Enenbach.....		.....	.....	National Nor. 8 Carroll Nor. 1 . .
Woodburn	A. J. Mitchell.....	6	.....	.....	.....
Woodward	Geo Ranney .....	4	.....	I. S. N. S. 2½	.....
	Louise Rowe.....	8	Iowa State Col 4.	.....	.....

## —TWO YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
M. Di.	2	Algebra	72	5 35	U. S. History	18	5 30	English	126	5 30			
		Geometry	36	5 35	Civics	36	5 30	Physiology	18	5 30			
		Arithmetic	18	5 30	Physical Geog.	24	5 30	Political Econ.	18	5 30			
		Gen. History	36	5 30	Physics	36	5 40						
		Algebra	36	5 30	Gen. History	36	5 30	Physics	36	5 30			
	10	Geometry	36	5 30	Civics	36	5 20	English	90	5 30			
		Arithmetic	18	5 20	Physical Geog.	36	5 20						
		Algebra	48	5 25	Gen. History	32	5 0	English	64	5 25			
		Geometry	32	5 25	Civics	18	5 30	Physiology	18	5 35			
		Arithmetic	32	5 25	Physical Geog.	18	5 25	Latin	64	5 30			
B. Di.	1	Algebra	54	5 40	U. S. History	18	5 40	Physiology	18	5 40			
B. Sc.		Geometry	36	5 40	Civics	36	5 40	Political Econ	18	5 40			
		Arithmetic	18	5 40	Physical Geog.	18	5 40	Botany	36	5 40			
		Gen. History	54	5 40	English	126	5 40	Latin	36	5 40			

*Note:*—In those schools offering more than one course the subjects are arranged in groups separated by blank lines as in the four-year courses. All pupils pursue the subjects named in the first group and complete the course by pursuing the subjects in one or more of the supplemental groups.

## HIGH SCHOOL STATISTICS-

High school.	Names of instructors.	Number of periods.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Andrew...	Gus. Delaney.....	11		Mo. N. S. 3.....	G. C. Bus. Col. 1
Arthur...	Hattie Anderson. ....	15	Iowa State Col. 1		
Ashton...	John L. Shearer.....	10		I. S. N. S. 2.....	
	Stella McGuire.....	2	(In H. S.).....	I. S. N. S. 1.....	
Atalissa...	C. R. Laraway.....	11	Drake 2.....		Simpson Col. 1 ..
Auburn...	W. D. Wendt. ....	11		I. S. N. S. 2.....	Nor. Ind. Norm. 1
	Mary E. Oaster.....	2		I. S. N. S. 2.....	
Aurora....	Lucy B. Francis.....			I. S. N. S. 1.....	
Ayrshire..	Della Gregg. ....				
Beacon....	J. P. McMurray....	12	Oskaloosa Col. 4..	I. S. N. S. 1.....	
Beaman...	F. E. Stahl.....	16	Upper Iowa 2, Dakota Wesleyan 1		
Blairsburg	W. W. Miller.....	8		I. S. N. S. 4.....	
Bode .....	A. M. Russell .....	16			Friend's Acad. 4. N. I. N. S. Dixon, Ill. 1, Bus. C. 1.
Bradgate..	O. C. Knoll.....	14			Nora Springs A. 2.
Brooks ....	W. L. Stevens... ..	13	Solo Ohio 1.....	Kan. State Nor. 1	
Calamus...	H. G. Games .....	9			Nat'l. Nor. Uni. Lebanon, 1.....
Charlotte.	Louis Greenberg .....	10	Drake 1.....		

## —TWO YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yrs experience in H. S.	Branches studied.			Branches studied.			Branches studied.			Branches studied.		
		Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.	Number weeks.	Rec. per week.	Rec. period.
	8	Algebra .....	48	5 30	Civics .....	36	5 25	English .....	102	5 30			
		Arithmetic .....	36	5 30	Physical Geog. .	36	5 25	Physiology .....	36	5 25			
		U. S. History .....	36	5 25	Physics .....	36	5 30	Political Econ. .	18	5 30			
B. Sc. ....		Algebra .....	36	5 25	Civics .....	20	5 20	Physiology .....	36	5 20			
		Arithmetic .....	36	5 25	Physical Geog. .	36	5 20	Political Econ. .	18	5 25			
		General Hist. ....	36	5 25	Physics .....	20	5 30						
		U. S. History .....	36	5 25	English .....	108	5 20						
B. Di. ....	2	Algebra .....	72	5 30	Civics .....	24	5 30	Physiology .....	36	5 25			
	1	Arithmetic .....	36	5 25	Physical Geog. .	24	5 25	Political Econ. .	18	5 30			
		General Hist. ....	36	5 30	Physics .....	36	5 30						
		U. S. History .....	36	5 25	English Lit. ....	26	5 30						
	3	Algebra .....	72	5 30	U. S. History .....	72	5 30	English .....	18	5 30			
		Geometry .....	36	5 30	Civics .....	36	5 30	Physiology .....	12	5 30			
		Arithmetic .....	36	5 30	Physical Geog. .	36	5 30	Political Econ. .	18	5 30			
		General Hist. ....	44	5 30	Physics .....	36	5 30						
B. Di. ....	2	Algebra .....	56	5 35	Civics .....	24	5 30	Word Analysis. .	36	5 35			
B. Di. ....	1	Arithmetic .....	20	5 35	Physical Geog. .	36	5 30	Book-keeping ..	20	5 25			
		General Hist. ....	36	5 30	Physics .....	16	5 35						
		U. S. History .....	12	5 25	English .....	72	5 35						
	2	Algebra .....	64	5 ..	Physical Geog. .	30	5 ..	Physiology .....	36	5 ..			
		Arithmetic .....	36	5 ..	Physics .....	32	5 ..	Book-keeping ..	20	5 ..			
		Civics .....	36	5 ..	English .....	100	5 ..						
		Algebra .....	54	5 40	Civics .....	36	5 25	English .....	72	5 30			
		Arithmetic .....	54	5 35	Physical Geog. .	36	5 25	Political Econ. .	28	5 35			
		U. S. History .....	36	5 30	Physics .....	36	5 40						
Ph. B., B. D. ....	22	Algebra .....	72	5 30	Civics .....	36	5 30	Botany .....	18	5 30			
		Arithmetic .....	36	5 30	Physical Geog. .	36	5 30	Word Analysis. .	18	5 30			
		General Hist. ....	72	5 30	English .....	108	5 30						
		Algebra .....	54	5 25	Physics .....	24	5 30	Latin .....	72	5 25			
	2	Arithmetic .....	18	5 20	English .....	72	5 15	Book-keeping or					
		General Hist. ....	54	5 25	Political Econ. .	18	5 25	Review .....	18	5 20			
		Physical Geog. .	28	5 25	Botany .....	20	5 25						
M. Di. ....		Algebra .....	44	5 30	Physical Geog. .	16	5 30	Political Econ. .	8	5 30			
		Arithmetic .....	36	5 30	Physics .....	16	5 30						
		U. S. History .....	30	5 0	English .....	74	5 30						
		Civics .....	12	5 30	Physiology .....	12	5 30						
		Algebra .....	32	5 30	U. S. History .....	18	5 25	English .....	84	5 30			
		Arithmetic .....	16	5 30	Civics .....	18	5 30	Botany .....	24	5 25			
B. A. ....	4	Gen. History .....	32	5 25	Physical Geog. .	16	5 25						
	5	Algebra .....	72	5 25	Gen. History .....	36	5 30	Physical Geog. .	20	5 25			
		Geometry .....	36	5 30	U. S. History .....	36	5 25	Physics .....	36	5 30			
		Arithmetic .....	36	5 30	Civics .....	16	5 25	English .....	72	5 25			
	10	Algebra .....	64	5 25	Physical Geog. .	14	5 30	Physiology .....	28	5 25			
		Arithmetic .....	32	5 25	Physics .....	32	5 25	Political Econ. .	32	5 30			
		Civics .....	64	5 20	English .....	106	5 15						
		Algebra .....	38	5 30	U. S. History .....	36	5 30	English .....	134	5 20			
B. S. ....	5	Arithmetic .....	36	5 30	Civics .....	76	5 30	Physiology .....	36	5 20			
		Gen. History .....	38	5 20	Physical Geog. .	38	5 20						
	8	Algebra .....	40	5 35	Civics .....	40	5 20	Physiology .....	20	5 20			
		Arithmetic .....	40	5 40	Physical Geog. .	40	5 35						
		U. S. History .....	40	5 30	English .....	130	5 25						

## HIGH SCHOOL STATISTIC

High school.	Name of instructors	Number of period..	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Coneaville	Lewis G. Abel.....	10	.....	I. S. N. S. 2 .....	.....
Dakota City.....	E. B. Bravinder .....	16	.....	I. S. N. S. 2 .....	.....
Delaware.	Daisy B. LeMaster.....	24	Rio Grande Col. 8 Taylor Univ. 1..	.....	.....
Delhi.....	J. C. McGee.....	12	.....	I. S. N. S. 8.....	.....
Dickens ...	C. L. Carrington.....	9	.....	I. S. N. S. 8½ .....	Buena Vista C. ½
Dumont...	Alice Swope, .....	11	H. P. C. 1 Drake 2	.....	.....
	Alice Cowie .....	11	.....	I. S. N. S. 8 .....	.....
Durant...	E. A. Cromer .....	11	Cornell Col. 4 .....	.....	.....
	Mable Dutton.....	11	.....	.....	.....
Dyersville	Will L. Evans.....	..	.....	.....	So. Ia. N. S. Drake ½
Ellsworth.	O. S. von Krog. ....	..	H. P. C. 2 Drake 2	.....	Special Inst. in Europe 1..
Farhamville.....	O. E. Hibbs.....	10	.....	I. S. N. S. 8.....	.....
Fraser ....	John R. Curry .....	16	.....	Ill. State Nor. 2 .....	.....
Fredricksburg.....	Bess M. Rowe .....	8	.....	I. S. N. S. 1½ .....	.....
Garnaville	W. E. Lechridge.....	10	.....	.....	Hedrick Nor. 2..
	Ida Helbig.....	2	.....	.....	.....
Germania.	Fred F. Hansen .....	14	Ia. State Col. 1..	I. S. N. S. 1 Ter .....	.....

## —TWO YEAR COURSES.

Preparation.	Yr's experience in H.S.	High School Courses.											
Degrees held.		Branches studied.			Number weeks.	Rec. per week.	Rec. period.	Branches studied.			Number weeks.	Rec. per week.	Rec. period.
B. Di.....	4	Algebra.....	54	5	35	Civics.....	24	5	35	Physiology.....	18	5	35
		Arithmetic.....	35	5	35	Physical Geog....	15	5	35	Botany.....	19	5	40
		General Hist.....	37	5	40	Physics.....	38	5	40				
		U. S. History.....	38	5	30	English.....	90	5	40				
		Algebra.....	54	5	25	Civics.....	38	5	25	Physiology.....	38	5	20
	8	Arithmetic.....	90	5	25	Physical Geog....	18	5	25				
		U. S. History.....	54	5	25	English.....	105	5	5				
		Algebra.....	45	5		Civics.....	24	5		Political Econ....	24	5	
	2	Arithmetic.....	35	5		Physical Geog....	24	5		Book-keeping..	24	5	
		General Hist.....	48	5		Physics.....	38	5					
		U. S. History.....	12	2		English.....	48	5					
B. Di.....	6	Algebra.....	52	5	35	U. S. History.....	18	5	30	English.....	68	5	25
		Geometry.....	38	5	35	Civics.....	20	5	4	Physiology.....	18	5	25
		Arithmetic.....	38	5	40	Physical Geog....	18	5	30	Political Econ....	30	5	25
		General Hist.....	38	5	40	Physics.....	38	5	30	Latin.....	34	5	25
B. Di.....	2	Algebra.....	38	5	30	Physical Geog....	38	5	30	Political Econ....	28	5	30
		Arithmetic.....	28	5	30	Physics.....	38	5	30	Book-keeping..	18	5	30
		U. S. History.....	8	5	30	English.....	42	5	30				
		Civics.....	18	5	30	Physiology.....	8	5	30				
		Algebra.....	54	5	30	Civics.....	72	5	2	Physiology.....	36	5	20
B. Di.....		Arithmetic.....	38	5	25	Physics.....	54	5	20	Political Econ....	36	5	40
		U. S. History.....	38	5	30	English.....	54	5	20	Didactics.....	12	5	20
B. Ph.....	6	Algebra.....	38	5	35	Civics.....	18	5	30	Botany.....	19	5	30
		Arithmetic.....	38	5	30	Physical Geog....	15	5	30	Book-keeping..	18	5	30
		Gen. History.....	24	5	35	Physics.....	15	5	30				
		U. S. History.....	37	5	35	English.....	108	5	30				
		Algebra.....	40	5	30	Physical Geog....	12	2	30	Political Econ....	24	5	30
		Arithmetic.....	12	2	30	Physics.....	28	5	30	Botany.....	12	5	30
		Gen. History.....	16	5	35	English.....	110	2	25	Book-keeping..	20	2	30
		Civics.....	16	5	30	Physiology.....	16	2	30	Penmanship....	40	5	30
		Algebra.....	38	5	25	U. S. History.....	18	5	25	Physics.....	36	5	25
	6	Arithmetic.....	18	5	25	Civics.....	18	5	25	English.....	72	5	25
		Gen. History.....	3	5	25	Physical Geog....	18	5	25	Political Econ....	18	5	25
B. Di.....		Algebra.....	54	5	35	Civics.....	20	5	5	Physiology.....	36	5	35
	9	Arithmetic.....	18	5	35	Physical Geog....	24	5	5	Botany.....	18	5	35
		General Hist.....	8	5	35	Physics.....	2	5	35	Review.....	12	5	45
		U. S. History.....	16	5	35	English.....	72	5	35				
		Algebra.....	72	5	20	Civics.....	8	5	2	Physiology.....	36	5	30
		Arithmetic.....	24	5	20	Physical Geog....	36	5	20	Orthography....	72	5	30
		General Hist.....	36	5	20	Physics.....	36	5	2	Book-keeping..	20	5	30
		U. S. History.....	36	5	20	English.....	72	5	20	Latin—Begin..	36	5	30
		Algebra.....	38	5	35	General Hist.....	72	5	30	English.....	108	5	20
	8	Geometry.....	14	5	40	U. S. History.....	36	5	25				
		Arithmetic.....	36	5	30	Civics.....	72	5	30				
		Algebra.....	36	5		Civics.....	18	5		Physiology.....	10	5	
	12	Arithmetic.....	12	5		Physical Geog....	18	5		Political Econ....	12	5	
		General Hist.....	4	5		Physics.....	36	5		Botany.....	14	5	
		U. S. History.....	12	5		English.....	66	5		Book-keeping..	12	8	
		Algebra.....	38	5	25	U. S. History.....	38	5	2	English.....	72	5	30
	1	Arithmetic.....	36	5	25	Civics.....	18	5	25				
		General Hist.....	35	5	30	Physical Geog....	1	5	25				

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number rec. period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Gibson....	O. W. Moore.....			I. S. N. S. ....	
Grant. ....	C. M. Neveln.....	12	Des M. Col. 2 Drake 2 terms..		
Gravity...	D. Paul Dale .....	14	Drake $\frac{3}{4}$ .....		
Hamilton.	S. B. Wolfe .....		Simpson Col. 1. ....		
Hancock..	Mrs. K. Renshaw.....	17		I. S. N. S. 1.....	
Hazelton..	Anna Maloney.....	16		I. S. N. S. 2....	
Hillsdale.	R. D. Nelson.....	16		I. S. N. S. $\frac{1}{2}$ .....	
Kensett..	A. L. Burgoon.....	5	Tobin College 1, Drake 1 .....		
Kirkman..	Roland Meyers.....	15			Woodbine Nor. 1.
Kirkville..	C. H. Thomas. ....	12	I. W. U. 1.....		High. Park Col. 1
Knowlton.	Frank S. Wiley.....	12			Drake Sum. Sch. 3
Lester.....	C. B. Hightower.....	16	Drake. ....		Dexter Normal...
Liberty- ville..	C. E. Ward, Jr.....	19	Ia. Wes. 2.....	I. S. N. S. Sum. 1	
Linn Grove..	J. P. Sanning.....	8	North West. Col. Naperville Ill. 4 S. U. I. 1..		West Union Col. 2 Le Mars..

## —TWO YEAR COURSES.

Preparation.		Yr's experience in H.S.	High School Courses.											
Degrees held.			Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
B. Di.			Algebra	32	5	15	Civics	32	5	15	English	64	5	30
			Geometry	32	5	25	Physical Geog.	32	5	15	Physiology	6	5	30
			General Hist.	64	5	30	Physics	32	5	20	Political Econ.	32	5	30
			Algebra	72	5	0	Civics	20	5	25	Political Econ.	6	5	30
			Arithmetic	72	5	3	Physical Geog.	16	5	30	Book-keeping	12		
			General Hist.	24	5	5	English	96	5	3				
			U. S. History	36	5	25	Physiology	16	5	24				
			Algebra	80	5	25	Civics	2	5	25	Political Econ.	20	5	35
			Geometry	36	5	2	Physical Geog.	0	5	24				
			General Hist.	44	5	24	English	72	5	25				
	4		Algebra	90	5	3	Civics	30	5	2	Physiology	32	5	15
			Geometry-Solid	32	5	3	Physical Geog.	30	5	20				
			U. S. History	24	5	25	English	44	5	25				
	2		Algebra	36	5	2	Civics	30	5	25	English	72	5	35
			Arithmetic	36	5	25	Physical Geog.	2	5	24	Physiology	24	5	25
			General Hist.	8	5	45	Physics	36	5	25				
	1		Algebra	36	5	3	Civics	36	5	30	English	90	5	30
			Arithmetic	36	5	30	Physical Geog.	15	5	30				
			General Hist.	36	5	3	Physics	3	5	30				
			Algebra	36	5	3	Civics	16	5	20	Physiology	16	5	30
			Arithmetic	36	5	3	Physical Geog.	16	5	20	Political Econ.	5	5	30
			General Hist.	36	5	3	Physics	3	5	20	Botany	12	5	30
			U. S. History	36	5	2	English	3	5	20				
			Algebra	44	5	24	Civics	24	5	25	Political Econ.	16	5	35
			Arithmetic	24	5	2	Physical Geog.	2	5	25	Botany	16	5	25
			General Hist.	46	5	14	Physics	32	5	25	Book-keeping	20		
			U. S. History	16	5	35	English	44	5	25				
	5		Algebra	5	5	3	Physical Geog.	16	5	45	Political Econ.	16	5	35
			General Hist.	3	5	25	Physics	3	5	30	Botany	16	5	25
			Civics	15	5	24	English	72	5	25				
	4		Algebra	48	5	30	Civics	32	5	25	Physiology	16	5	30
			Arithmetic	4	5	30	Physical Geog.	32	5	30	Political Econ.	16	5	35
			General Hist.	32	5	30	Physics	16	5	35				
			U. S. History	52	5	30	English	61	5	30				
	1		Algebra	32	5	30	Physics	32	5	30	Book-keeping	32	5	30
			Geometry	3	5	30	English	32	5	25	Latin	32	5	30
			General Hist.	72	5	25	Political Econ.	16	5	35				
			Civics	16	5	25	Botany	16	5	30				
			Algebra	36	5		Physical Geog.	24	5		Political Econ.	24	5	
			Arithmetic	36	5		Physics	24	5					
			U. S. History	36	5		English	34	5					
			Civics	32	5		Physiology	36	5					
			Algebra	72	5		U. S. History	36	5	34	English	72	5	35
			Geometry	20	5	30	Civics	16	5	35	Physiology	36	5	25
			Arithmetic	36	5	25	Physical Geog.	16	5	34	Political Econ.	16	5	25
			General Hist.	36	5	25	Physics	36	5	30				
			Algebra	54	5	30	Physical Geog.	18	5	34	English Hist.	18	5	40
			Geometry	36	5	40	Physics	18	5	44	Hist. of Greece	18	5	40
			Arithmetic	18	5	34	English Lit.	96	5	30	Zoology	18	5	40
			General Hist.	36	5	40	Physiology	18	5	34	Nature Study	18	2	30
	6		U. S. History	36	5	30	Political Econ.	18	5	44	Botany	18	5	40
			Civics	36	5	30								

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Little Rock..	A. J. Donald.....	8	.....	I. S. N. S. ....	.....
Lerhville.	N. L. McDiarmid.....	6	.....	.....	Mich. State Nor. Col. 4.....
	B. A. Forrester.....	7	.....	I. S. N. S. 2....	.....
Lovilia....	Newton J. Hibbs .....	2½	H. P. Col 2½....	.....	.....
Lowden..	B. S. Longerbeam.....	9	.....	.....	Valparaiso ¼ ....
Manly...	H. E. Dunn .....	14	.....	.....	Nora Springs Nor Col.....
Martinsburg...	W. H. Fasold.....	16	Drake.....	.....	.....
Meriden..	W. O. Dalley.....	16	.....	.....	.....
Modale...	Susie Tamistea.....	17	.....	I. S. N. S. 1.....	Woodbine Nor. 1.
Mondamin	Geo. E. Missildine.....	11	.....	I. S. N. S. 4....	.....
McCallsburg...	O. M. Lotton.....	14	.....	.....	Northern Ill. Nor. Dixon .....
Nodaway.	C. V. Frazier.....	8	.....	.....	.....
Ollie. ....	S. E. Divilbias.....	.....	.....	I. S. N. S. 1½ .....	.....
Ossian ...	Chas. A. Russell.....	12	.....	.....	Decorah Inst 4 yr.
Pacific Jet.	W. B. Gregg .....	12	.....	.....	Valparaiso 2..... H. P. Col. 1 term
Panama..	Albert McGinn .....	16	U. of Mo .....	.....	Denison College ¼ Drake 1-6.....

## —TWO YEAR COURSES.

Preparation.	Yr's experience in H. S.	High School Courses.											
Degrees held.		Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
		Algebra.....	72	5	33	Civics of Iowa.....	12	5	24	English.....	85	5	30
	2	Geometry.....	36	5	33	Civics of U. S. ....	6	5	20	Political Econ..	12	5	25
		Arithmetic.....	84	7	78	Physical Geog. ....	12	4	25				
		General Hist. ....	36	5	2	Physics.....	31	5	30				
		Algebra.....	48	7	40	General History.....	38	5	3	Physics.....	36	5	30
		Geometry.....	36	5	40	Civics.....	26	7	30	English.....	91	5	38
B. Di.		Arithmetic.....	72	5	30	Physical Geog. ....	18	5	30	Latin.....	72	5	30
		Algebra.....	32	5	25	Physical Geog. ....	16	5	25	Music.....	32	5	15
		Arithmetic.....	84	5	4	Physics.....	32	5	2	Book-keeping....	16	5	25
		Gen. History.....	16	5	25	English.....	61	5	5	Orthography....	1	5	20
		U. S. History.....	16	5	2	Physiology.....	16	5	25				
		Civics.....	16	5	25	Political Econ..	16	5	25				
	2	Algebra.....	36	5	30	U. S. History.....	20	5	25	English.....	64	5	25
		Arithmetic.....	5	5	25	Civics.....	8	5	25	Physiology.....	20	5	25
		Gen. History.....	36	5	25	Physics.....	25	5	30				
		Algebra.....	28	5	30	U. S. History.....	34	7	30	Physiology.....	36	5	30
		Arithmetic.....	34	5	30	Civics.....	36	5	3				
		Gen. History.....	36	5	30	English.....	72	5	30				
		Algebra.....	28	5	30	Civics.....	14	5	3	Political Econ..	16	5	30
		Arithmetic.....	14	5	30	Physical Geog. ....	32	5	30	Word Analysis..	32	5	10
		Gen. History.....	32	5	30	Physics.....	16	7	3	Book-keeping....	16	5	30
		U. S. History.....	16	5	30	English.....	48	5	30				
		Algebra.....	54	5	30	Civics.....	20	7	25	Physiology.....	8	5	25
		Arithmetic.....	16	5	30	Physical Geog. ....	20	4	24	Botany.....	1	5	30
		Gen. History.....	36	5	30	Physics.....	34	5	30				
		U. S. History.....	12	5	30	English.....	44	5	24				
	8	Algebra.....	34	5	20	U. S. History.....	36	5	20	English.....	42	5	15
		Arithmetic.....	56	5	20	Civics.....	12	5	15	Physiology.....	36	5	15
		General Hist. ....	12	5	2	Physics.....	8	5	15	Political Econ..	18	5	20
	2	Algebra.....	60	5	30	U. S. History.....	12	7	30	Physics.....	36	5	30
		Arithmetic.....	70	5	30	Civics.....	24	7	30	English.....	72	5	30
		General Hist. ....	36	5	30	Physical Geog. ....	36	5	30	Political Econ..	24	5	30
	16	Algebra.....	20	5	2	U. S. History.....	34	7	24	Physiology.....	36	5	25
		Arithmetic.....	34	5	25	Civics.....	48	5	2	Latin-BEGIN.....	16	5	25
		General Hist. ....	20	5	25	English.....	42	5	25				
	3	Algebra.....	48	5	40	Physical Geog. ....	14	7	30	Political Econ..	24	5	30
		Arithmetic.....	36	5	0	Physics.....	36	5	4	Botany.....	12	5	30
		U. S. History.....	34	5	30	English.....	54	5	30	Penmanship.....	36	5	30
		Civics.....	18	5	30	Physiology.....	16	5	40	Music.....	72	5	30
	4	Algebra.....	32	5	20	U. S. History.....	32	5	25	English.....	64	5	35
		Arithmetic.....	32	5	20	Civics.....	32	5	30	Physiology.....	32	5	25
		General Hist. ....	32	5	30	Physical Geog. ....	32	5	25	Political Econ..	32	5	25
	7	Algebra.....	76	5	30	U. S. History.....	30	5	0	English.....	112	5	25
		Arithmetic.....	34	5	30	Civics.....	32	5	30	Physiology.....	16	5	25
		Gen. History.....	28	5	30	Physics.....	28	5	30	Book-keeping....	16	5	30
		Algebra.....	36	5	30	U. S. History.....	12	5	25	English.....	90	5	25
	5	Geometry.....	18	5	30	Civics.....	18	5	25	Political Econ..	18	5	25
		Arithmetic.....	34	5	30	Physical Geog. ....	24	5	25				
		Gen. History.....	36	5	25	Physics.....	18	4	30				
	14	Algebra.....	34	5	25	Civics.....	24	5	25	Physiology.....	16	5	20
		Arithmetic.....	36	5	30	Physical Geog. ....	20	5	25	Political Econ..	36	4	25
		Gen. History.....	36	4	20	Physics.....	36	5	20				
		U. S. History.....	36	5	25	English.....	36	5	20				

## HIGH SCHOOL STATISTICS

High school.	Name of instructor.	Number of period.	Preparation.		
			Years in college or university.	Years in a State Normal.	Years in other institutions above high school grade.
Fannell ..	Mark Mullin.....	1	.....	.....	Nor Ind Nor Col 2 West Nor. Col. 2.
Persia .....	L. A. Giddings .....	1	.....	.....	Woodbine Nor. 2
Pilot Mound	E. E. Bently.....	1	Simpson 2	.....	.....
Pleasanton...	Emma Mark .....	2	Simpson Co. 2½	.....	H. P. Col. 1½, O. C. C. O. 18 mo..
Plymouth	Elmer Charlson.....	1	.....	I. S. N. S. 2½	.....
Polk City.	L. H. Andrews.....	1	S. U. I. 1	I. S. N. S. 3	.....
Prairieburg....	Llewellyn Dunlap.....	1	Oce Col. 4	.....	.....
Princeton.	C. G. Umbaugh .....	1	.....	I. S. N. S. 3	.....
Promise City. ...	J. S. Ulm .....	11	.....	I. S. N. S. 2 summer terms	.....
Quaque-ton.....	Anna E. Barrett....	1	.....	I. S. N. S. 3	.....
Quimby...	J. A. Gillaspie.....	1	Drake 5.	.....	.....
Richard ..	J. H. Atkinson.....	10	.....	I. S. N. S. 1½	.....
Ridgeway	H. N. Williams.....	17	Cornell 1	.....	.....
Riverton	Will R. Woodruff.....	6	Weeping Water 1	.....	Fremont Nor. 1.
	Anora Stephens.....	7	Simpson Col	.....	.....
Rodney...	Chas. R. Wiseman.....	13	Nabr. Wesleyan Univ.	.....	.....

## —TWO YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yr's experience in H. S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
A. B.....		Algebra.....	51	5	30	Civics.....	18	5	30	Physiology.....	18	5	30
		Arithmetic.....	51	5	30	Physical Geog.....	18	5	30	Political Econ.....	18	5	30
		Gen. History.....	81	5	30	Physics.....	18	5	30	Music.....	72	2	30
		U. S. History.....	18	5	30	English.....	72	2	30				
.....	2	Algebra.....	72	5	25	Civics.....	33	1	30	English.....	72	5	20
		Arithmetic.....	12	5	25	Physical Geog.....	16	5	30	Physiology.....	24	5	20
		U. S. History.....	21	5	20	Physics.....	36	2	20	Political Econ.....	16	5	25
.....		Algebra.....	36	5	25	Civics.....	20	5	15	Physiology.....	24	5	15
		Arithmetic.....	20	5	15	Physical Geog.....	36	5	15	Political Econ.....	12	5	15
		Gen. History.....	33	5	15	Physics.....	24	5	15				
		U. S. History.....	24	5	15	English.....	72	5	15				
.....		Algebra.....	32	5	30	U. S. History.....	32	5	30	English.....	48	5	20
		Arithmetic.....	64	5	30	Civics.....	3	5	30	Physiology.....	12	5	20
		General Hist.....	32	5	30	Physical Geog.....	16	5	20	Political Econ.....	16	5	20
B. Di.....	2	Algebra.....	72	5	30	U. S. History.....	36	5	30	Physics.....	36	5	20
		Arithmetic.....	15	5	30	Civics.....	18	5	15	English.....	10	5	25
		General Hist.....	36	5	20	Physical Geog.....	31	5	20				
M. Di.....	7	Algebra.....	32	5	25	Civics.....	16	5	30	Physiology.....	2	5	20
		Arithmetic.....	32	5	30	Physics.....	32	5	25	Book-keeping.....	36	5	..
		U. S. History.....	21	5	25	English.....	64	2	20				
.....		Algebra.....	72	5	25	U. S. History.....	72	5	20	English.....	36	5	25
		Arithmetic.....	72	3	25	Physical Geog.....	12	5	20	Physiology.....	18	5	20
		General Hist.....	31	5	30	Physics.....	36	5	30				
Ph. B.....		Algebra.....	36	5	30	U. S. History.....	18	5	30	English.....	108	5	30
		Arithmetic.....	36	5	30	Civics.....	72	2	30	Physiology.....	18	5	30
B. Di.....	2	Algebra.....	64	5	30	Civics.....	16	5	25	Political Econ.....	16	5	30
		Geometry.....	2	5	30	Physical Geog.....	16	5	30	Botany.....	16	5	30
		Arithmetic.....	32	5	30	Physics.....	12	5	30	Book-keeping.....	1	5	40
		General Hist.....	3	5	30	English.....	4	5	30	Latin.....	5	5	30
		U. S. History.....	16	5	30	Physiology.....	16	5	30				
.....		Algebra.....	36	5	30	Civics.....	36	5	20	Physiology.....	12	5	30
		Arithmetic.....	36	5	30	Physical Geog.....	12	5	30	Political Econ.....	12	5	30
		General Hist.....	36	5	30	Physics.....	12	5	30				
		U. S. History.....	12	5	20	English.....	60	5	20				
B. Di.....	8	Algebra.....	36	5	30	U. S. History.....	24	5	20	English.....	31	5	30
		Arithmetic.....	12	5	30	Civics.....	14	5	20	Physiology.....	12	5	30
		General Hist.....	36	5	30	Physical Geog.....	3	5	15				
A. B. A. M.....		Algebra.....	36	5	30	Civics.....	18	5	30	English.....	72	5	35
		Arithmetic.....	16	5	30	Physical Geog.....	36	5	30	Political Econ.....	36	5	30
		General Hist.....	36	5	30	Physics.....	36	5	30				
.....	5	Algebra.....	51	5	25	U. S. History.....	36	5	25	English.....	90	5	25
		Arithmetic.....	12	5	25	Civics.....	36	5	25	Political Econ.....	36	5	25
		General Hist.....	36	5	25	Physical Geog.....	18	5	25	Latin.....	36	5	25
.....	15	Algebra.....	44	5	40	Civics.....	36	5	30	English.....	72	5	30
		Arithmetic.....	18	5	40	Physical Geog.....	20	5	35	Physiology.....	16	5	35
		General Hist.....	36	5	40	Physics.....	36	5	30	Book-keeping.....	20	5	35
.....		Algebra.....	36	5	20	U. S. History.....	18	5	30	Physics.....	36	5	20
		Arithmetic.....	18	5	25	Civics.....	36	5	20	English.....	72	5	30
		General Hist.....	36	5	20	Physical Geog.....	18	5	20	Book-keeping.....	19	5	20

## HIGH SCHOOL STATISTICS

High school.	Name of instructors.	Number of period.	Preparation.		
			Years in college or university.	Years in state Normal.	Years in other institutions above high school grade.
Rose Hill.	Frank Souter.....	16	Oskaloosa Col. 2..	.....	H. P. Col. 1 .....
Rowan...	M. L. Howell.....	18	.....	I. S. N. S. ....	.....
Ryan.....	Mary Waddick.....	20	.....	I. S. N. S. 4 ter..	.....
Schleswig.	F. N. Olry.....	16	.....	I. S. N. S. 1½ .....	.....
Searsboro.	F. S. Wright .....	16	.....	.....	Cor. Col. 2. ....
South English.	O. Hamersly .....	14	.....	I. S. N. S. 3.....	.....
Swaledale.	G. C. Clemmer.....	11	Cornell 2 .....	.....	.....
Tracy .....	H. H. Van Benthuyzen .....	20	.....	.....	.....
Union ville.....	W. K. Bishop.....	8	.....	I. S. N. S. 5 terms	.....
Walcott..	Henry E. Ronge.....	5	.....	.....	.....
Washta...	W. E. Kapp .....	8	U. of Mich. 4.....	.....	S. U. I. 1 sum. ses
Winthrop.	W. E. Moss.....	6	.....	I. S. N. S. 2 .....	High. Park Col. 3 mo., Cedar Rapids Bus. Col. 3 m
	Grace Shea .....	8	.....	.....	.....
Woolstock	E. F. Snow.....	12	Drake 4 .....	.....	.....

## — TWO YEAR COURSES.

Preparation.		High School Courses.											
Degrees held.	Yrs experience in H.S.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.	Branches studied.	Number weeks.	Rec. per week.	Rec. period.
.....	8	Algebra .....	86	5	25	Civics .....	86	5	20	English .....	90	5	20
.....		Arithmetic .....	36	5	25	Physical Geog. ....	18	5	20	Physiology .....	18	5	20
.....		U. S. History .....	16	5	20	Physics .....	18	5	20				
.....	1	Algebra .....	33	5	25	U. S. History .....	20	5	25	English .....	92	5	25
.....		Arithmetic .....	36	5	25	Civics .....	14	5	25	Physiology .....	14	5	25
.....		Gen. History .....	36	5	25	Physical Geog. ....	20	5	25	Political Econ. ....	14	5	25
.....	1	Algebra .....	72	5	20	Civics .....	86	5	15	English .....	126	5	20
.....		Arithmetic .....	72	5	20	Physical Geog. ....	36	5	15				
.....	5	Algebra .....	26	5	25	Physics .....	86	5	20	Book-keeping .....	16	5	20
.....		Arithmetic .....	26	5	25	English .....	134	5	20	Music .....	36	5	15
.....		U. S. History .....	54	5	25	Physiology .....	38	5	25				
.....		Civics .....	24	5	25	Political Econ. ....	24	5	25				
.....		Physical Geog. ....	36	5	25	Botany .....	16	5	25				
.....	6	Algebra .....	48	5	25	Civics .....	20	5	25	Physiology .....	16	5	20
.....		Arithmetic .....	8	5	25	Physical Geog. ....	16	5	25	Botany .....	8	5	25
.....		Gen. History .....	32	5	25	Physics .....	24	5	25	Book-keeping .....	8	5	25
.....		U. S. History .....	12	5	25	English .....	48	5	20	Word Analysis .....	16	5	20
B. Di .....		Algebra .....	32	5	20	Physical Geog. ....	16	5	20	Botany .....	16	5	20
.....		Arithmetic .....	32	5	20	Physics .....	32	5	20	Book-keeping .....	16	5	20
.....		General Hist. ....	32	5	20	English .....	64	5	20	Orthog. and			
.....		U. S. History .....	16	5	20	Physiology .....	16	5	20	word Anal. ....	16	5	20
.....		Civics .....	16	5	20	Political Econ. ....	16	5	20				
.....	4	Algebra .....	36	5	20	Civics .....	36	5	20	English .....	72	5	20
.....		Arithmetic .....	36	5	20	Physical Geog. ....	24	5	20	Botany .....	12	5	20
.....		General Hist. ....	36	5	20	Physics .....	36	5	20	Eng. and Amer-			
.....										ican classics .....	36	5	20
.....	10	Algebra .....	64	5	20	Civics .....	32	5	20	English .....	96	5	20
.....		Arithmetic .....	32	5	20	Physical Geog. ....	16	5	25	Physiology .....	16	5	20
.....		U. S. History .....	16	5	25	Physics .....	16	5	25	Political Econ. ....	16	5	20
.....		Algebra .....	32	5	25	Civics .....	16	5	25	Political Econ. ....	32	5	20
.....	1	Arithmetic .....	31	5	25	Physical Geog. ....	16	5	20	Botany .....	16	5	20
.....		General Hist. ....	32	5	20	Physics .....	32	5	20	Book-keeping .....	16	5	20
.....		U. S. History .....	16	5	20	English .....	32	5	20				
.....	8	Algebra .....	40	5	20	Civics .....	30	5	20	Political Econ. ....	20	5	20
.....		Geometry .....	40	5	20	Physical Geog. ....	20	5	20	Botany .....	20	5	20
.....		Arithmetic .....	40	5	20	Physics .....	40	5	20	German .....	30	5	15
.....		General Hist. ....	40	5	20	English .....	120	5	20				
.....		U. S. History .....	40	5	20	Physiology .....	40	5	20				
A. B. ....	5	Algebra .....	36	5	35	U. S. History .....	18	5	35	Physics .....	36	5	35
.....		Geometry .....	36	5	35	Civics .....	18	5	35	English .....	72	5	35
.....		General Hist. ....	36	5	35	Physical Geog. ....	18	5	35	Botany .....	18	5	35
.....		Algebra .....	72	5	40	Physics .....	36	5	40	Latin .....	72	5	40
.....		Civics .....	31	5	40	English .....	36	5	40				
B. Di .....	5	Physical Geog. ....	12	5	40	Political Econ. ....	24	5	40				
.....													
B. S. ....	4	Algebra .....	54	5	30	U. S. History .....	36	5	30	Eng. Lit. ....	144	5	30
.....		Arithmetic .....	36	5	30	Civics .....	18	5	30	Physiology .....	18	5	30
.....		General Hist. ....	36	5	30	Physical Geog. ....	18	5	30	German .....	36	5	30



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**TWELFTH BIENNIAL REPORT**

**OF THE**

**STATE MINE INSPECTORS**

**FOR THE**

**Two Years Ending June 30, 1905,**

**TO THE**

**GOVERNOR OF THE STATE OF IOWA.**

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**PRINTED BY ORDER OF THE GENERAL ASSEMBLY**

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**DES MOINES:**  
**BERNARD MURPHY, STATE PRINTER.**  
**1905.**



## STATE MINE INSPECTORS.

---

District No. 1. JOHN VERNER, Chariton.  
District No. 2. JAMES A. CAMPBELL, Ottumwa.  
District No. 3. EDWARD SWEENEY, Des Moines.

---

## BOARD OF EXAMINERS.

FOR MINE INSPECTORS, MINE FOREMEN AND HOISTING  
ENGINEERS.

---

H. BOOTH, *President*, Knoxville.  
JOHN OWENS, *Secretary*, Beacon.  
J. W. BAKER, *Treasurer*, Des Moines.  
EDWARD GRAY, Des Moines.  
JOHN CALDWELL, Seymour.



## STATISTICS RELATING TO COAL MINING IN IOWA FOR THE TWO YEARS ENDING JUNE 30, 1905.

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The steady annual increase in the coal production of the State, which commenced ten years ago, has been continued through the biennial period just closed and it can be said that the coal mining industry of Iowa, while by no means enjoying the high tide of prosperity, has been in fairly satisfactory condition in the recent past.

The increase in tonnage in the year just closed over the year ending June 30, 1904 was unusually high and amounted to nearly 600,000 tons. This gain, however, was not uniform in all parts of the State, in fact; there were heavy losses in some counties. Lucas county showed a loss of 74,000 tons last year; the reduction in the coal output of Keokuk county amounted to 34,000 tons, and Webster county's loss was 33,000 tons. On the other hand, Monroe, Polk, Mahaska, Boone and Marion counties made good gains, Monroe county leading in this respect with an increased production of more than 300,000 tons.

Of the twenty-three coal producing counties in the State, three counties, Monroe, Polk and Appanoose, produced more than three-fifths of last year's output. Eleven counties produced more than 100,000 tons each while the combined coal output of all the remaining twelve counties amounted to but little more than 160,000 tons.

The following tables give the coal producing counties of the State, the number of mines, the coal output and the number of men employed in and around the mines.

Number of mines in operation in each county, their coal output, number of miners and other employees for the year ending June 30, 1904.

Number of mines.	County.	Tons of coal of all grades produced.	Number of miners employed.	Number of other inside employees.	Number of outside employees.	Total number employed.	Number.
19	Monroe.....	1,808,975	2,249	863	418	3,530	1
27	Polk.....	966,172	1,547	500	280	2,327	2
33	Appanoose.....	895,759	2,465	547	390	3,372	3
14	Mahaska.....	590,428	873	226	180	1,248	4
18	Marion.....	845,629	581	144	81	806	5
16	Boone.....	845,472	789	169	112	1,070	6
12	Wapello.....	826,188	581	154	106	791	7
11	Jasper.....	802,590	477	170	68	709	8
13	Lucas.....	289,884	388	174	56	621	9
15	Webster.....	165,838	318	121	47	481	10
10	Wayne.....	45,424	275	70	42	387	11
8	Keokuk.....	52,575	80	28	19	127	12
12	Guthrie.....	29,858	137	11	16	164	13
6	Van Buren.....	17,844	38	5	15	58	14
4	Page.....	17,400	86	30	18	119	15
5	Dallas.....	16,586	49	19	8	76	16
5	Greene.....	15,898	62	11	7	80	17
18	Adams.....	15,185	110	9	15	134	18
6	Scott.....	14,983	54	23	6	82	19
7	Taylor.....	13,320	51	10	6	67	20
5	Warren.....	10,937	42	8	9	59	21
1	Jefferson.....	875	8	.....	1	4	22
1	Davis.....	125	4	4	1	9	23
800	Total.....	6,214,879	11,198	3,285	1,882	16,815	

Number of mines in operation in each county, their coal output, number of miners and other employees for the year ending June 30, 1905.

Number of mines.	County.	Tons of coal of all grades produced.	Number of miners employed.	Number of other inside employees.	Number of outside employees.	Total number employed.	Number.
20	Monroe.....	2,117,127	2,697	885	384	3,916	1
30	Polk.....	1,094,521	1,805	566	334	2,705	2
91	Appanoose.....	895,490	2,487	638	400	3,525	3
22	Mahaska.....	676,409	1,071	289	149	1,509	4
15	Boone.....	422,802	766	273	113	1,151	5
19	Marion.....	872,855	601	189	80	840	6
12	Wapello.....	868,029	665	149	106	910	7
12	Jasper.....	805,027	454	143	74	671	8
4	Lucas.....	165,256	305	154	59	518	9
11	Webster.....	122,058	238	95	39	367	10
10	Wayne.....	104,873	334	79	42	455	11
15	Guthrie.....	29,416	102	81	17	150	12
15	Adams.....	19,577	184	18	18	165	13
6	Keokuk.....	18,191	29	8	7	44	14
6	Greene.....	17,470	74	23	11	108	15
9	Page.....	17,166	79	13	9	101	16
4	Taylor.....	15,651	88	21	12	121	17
5	Dallas.....	13,599	43	17	10	70	18
6	Van Buren.....	12,643	24	5	15	44	19
5	Warren.....	9,488	48	11	9	68	20
4	Scott.....	5,210	33	14	6	53	21
2	Jefferson.....	2,060	9	1	2	12	22
3	Davis.....	1,116	11	6	4	21	23
76	Total.....	6,806,011	12,197	3,587	1,840	17,624	

STATE MINE INSPECTORS.

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Number of mines in each district, their coal output, number of miners and other employes for the year ending June 30, 1904.

District.	Number of mines	Tons of coal of all grades produced.	Number of miners employed.	Number of other inside employes.	Number of outside employes.	Total number of employes.
Number 1.....	181	2,895,470	4,722	1,813	761	5,796
Number 2.....	72	1,972,528	2,048	948	534	4,580
Number 3.....	97	1,845,886	2,428	1,024	587	4,989
Total.....	350	6,714,884	11,198	3,785	1,882	16,815

Number of mines in each district, their coal output, number of miners and other employes for the year ending June 30, 1905.

District.	Number of mines	Tons of coal of all grades produced.	Number of miners employed.	Number of other inside employes.	Number of outside employes.	Total number of employes.
Number 1.....	146	2,847,800	5,010	1,468	777	7,260
Number 2.....	82	2,443,550	2,572	993	459	4,934
Number 3.....	98	2,010,101	2,616	1,161	604	5,390
Total.....	326	7,301,451	12,197	3,522	1,840	17,624

### FATAL AND SERIOUS ACCIDENTS.

It is very gratifying that the two years just closed show a greater tonnage per life lost than any of the five preceding biennial periods; and what is better, a lower fatality rate per 1,000 employees. Last year's record in this respect is especially pleasing; 283,584 tons of coal were mined for each life lost, and the fatality rate per 1,000 employees reached the low mark of 1.4.

During the year ending June 30, 1904, thirty-one fatal and eighty-four serious accidents occurred in the mines of the State. Last year twenty-four fatal and one hundred serious accidents were reported.

A summary of these accidents, their causes, etc., will be found in the following tables:

**Causes of fatal mine accidents in Iowa during the year ending June 30, 1904, and counties in which the accidents occurred.**

Cause.	Appanoose.	Monroe.	Lucas.	Wayne.	Page.	Mahaska.	Keokuk.	Polk.	Webster.	Jasper.	Boone.	Total.
Falls of roof or coal .....	2	7	...	...	1	2	...	4	..	1	1	18
Material falling down shaft .....	...	...	...	1	1	...	...	...	...	...	...	2
Explosion caused by shot .....	...	2	...	...	1	...	...	...	...	...	...	2
Overcome by damp .....	...	...	1	...	...	...	...	...	...	...	...	1
Crushed by cage .....	...	1	...	...	...	...	...	...	...	...	...	1
Flying coal from shot .....	...	1	...	...	...	...	1	...	...	1	...	3
Run over by cars .....	...	...	...	...	...	1	...	1	...	...	...	2
Falling from tower .....	...	...	...	...	...	1	...	...	1	...	...	1
Falling in sump .....	...	...	...	...	...	...	...	...	1	...	...	1
Total .....	2	11	1	1	2	3	1	6	1	2	1	31

**Causes of serious mine accidents in Iowa during the year ending June 30, 1904, and counties in which the accidents occurred.**

Cause.	Appanoose.	Monroe.	Lucas.	Mahaska.	Wapello.	Keokuk.	Marion.	Polk.	Jasper.	Boone.	Webster.	Scott.	Greene.	Total.
Falls of roof or coal .....	9	15	...	4	7	...	...	8	2	4	1	1	1	32
Injured by cars .....	2	5	...	...	...	...	...	2	2	...	...	...	...	16
Injured by cage .....	...	7	1	...	...	2	...	...	...	...	...	...	...	10
Miscellaneous .....	1	2	...	...	...	...	1	1	1	...	...	...	...	6
Total .....	12	29	6	4	7	2	1	11	5	4	1	1	1	84

**Causes of fatal mine accidents in Iowa during the year ending June 30, 1905, and counties in which the accidents occurred.**

Cause	Appanoose.	Monroe.	Lucas.	Wayne.	Marion.	Mahaaka.	Folk.	Boone.	Greene.	Total.
Falls of roof or coal.....	1	5	1	....	1	....	6	....	1	15
Falling down shaft.....	1	....	....	....	....	....	....	....	....	1
Crushed by cars.....	....	....	....	1	....	1	2	....	....	4
Crushed by cage.....	....	....	....	....	1	....	....	1	....	2
Flying coal from shot.....	....	....	....	....	....	1	....	....	....	1
Powder explosion.....	....	....	....	....	....	....	1	....	....	1
Total.....	2	5	1	1	2	2	9	1	1	24

**Causes of serious mine accidents in Iowa during the year ending June 30, 1905, and counties in which the accidents occurred.**

Cause.	Appanoose.	Monroe.	Lucas.	Wayne.	Marion.	Mahaaka.	Keokuk.	Wapello.	Folk.	Jasper.	Boone.	Guthrie.	Total.
Falls of roof or coal.....	6	20	1	2	5	1	1	5	18	3	1	1	64
Cars.....	2	8	4	....	2	....	....	....	4	1	....	....	21
Material falling down shaft.....	1	....	....	....	....	....	....	....	1	....	....	....	2
Flying coal from shot.....	....	2	....	....	....	1	....	3	8	....	....	....	3
Burnt by powder.....	....	....	....	....	....	....	....	1	1	....	....	....	1
Miscellaneous.....	....	1	....	....	....	1	....	2	2	....	....	....	6
Total.....	9	31	5	2	7	3	1	5	29	6	1	1	100

**Fatal and serious accidents in the mines of the State during the year ending June 30, 1904, with relation to coal produced and number of employees.**

Districts.	Number of Accidents.		Number of Tons of Coal Produced.	Tons of Coal Produced for Each Accident.		Number of Employees.	Number of Employees for Each Accident.	
	Fatal.	Serious.		Fatal.	Serious.		Fatal.	Serious.
District No. 1.	18	28	2,395,470	134,267	85,552	6,796	523	248
District No. 2.	8	33	1,972,523	246,555	59,778	4,590	566	187
District No. 3.	10	23	1,846,886	184,639	80,278	4,989	499	217
Total....	36	84	6,214,879	565,461	225,608	16,375	1,588	652

Fatal and serious accidents in the mines of the State during the year ending June 30, 1905, with relation to coal produced and number of employes.

Districts.	Number of Accidents.		Number of Tons of Coal Produced.	Tons of Coal Produced for each Accident.		Number of Em- ployes.	Number of Em- ployes for each Accident.	
	Fatal.	Serious.		Fatal.	Serious.		Fatal.	Serious.
District No. 1.	7	33	2,347,300	335,537	73,855	7,250	1,096	226
District No. 2.	6	81	2,448,550	408,092	78,985	4,994	882	161
District No. 3.	11	37	2,010,101	182,736	54,327	5,380	489	145
Total .....	24	100	6,806,011	283,584	68,060	17,624	784	176

Table showing fatal mine accidents in Iowa for the last twelve years, their relation to coal tonnage and employes.

Year.	Number of accidents.	Tons of coal produced.	Tons of coal per accident.	Number of employes.	Fatality rate per 1000 employes.
1894 .....	19	8,777,898	198,810	10,258	1.9
1895 .....	20	8,195,896	159,792	10,992	1.8
1896 .....	23	8,525,490	180,254	11,451	2.
1897 .....	21	8,799,734	190,464	11,673	1.8
1898 .....	36	4,897,722	136,148	10,530	2.5
1899 .....	20	4,949,810	247,496	11,029	1.8
1900 .....	29	5,117,285	176,458	12,041	2.2
1901 .....	27	5,441,863	201,550	12,175	2.
1902 .....	55	5,514,206	100,258	12,002	4.2
1903 .....	21	6,185,734	294,569	12,192	1.6
1904 .....	31	6,214,379	200,464	16,815	1.9
1905 .....	24	6,806,011	283,584	17,624	1.4

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## BIENNIAL REPORT OF THE FIRST DISTRICT

### COUNTIES COMPRISING THE DISTRICT:

APPANOOSE,	MONROE (part),
LUCAS,	WAYNE,
TAYLOR,	PAGE,
ADAMS.	

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JOHN VERNER, INSPECTOR.  
CHARITON, IOWA.

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LETTER OF TRANSMITTAL.

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HON. ALBERT B. CUMMINS, Governor of Iowa.

*Sir*,—I have the honor to submit to you herewith the report of the First Inspection District, covering the biennial period ending June 30, 1905.

Very respectfully,

JOHN VERNER,

*Inspector First District.*



## REPORT OF FIRST DISTRICT.

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The law of this State provides that the mine inspectors shall meet in their general office in the Capitol biennially on or before August fifteenth preceding the regular session of the general assembly, and make report to the Governor of their official doings, including therein all matters which are especially committed to their charge, etc. To make this report as the law requires, the operators must be called upon for needed information, and it is essential that such information is furnished promptly.

The majority of the coal operators in this district have given this information with commendable promptness, while the considerable minority had to be urged repeatedly before a response could be had. Ninety-three per cent of the blanks sent out were filled out and returned to this office. Reports were received from every mine in Monroe, Lucas and Page county, while two small shipping mines, in Appanoose county, and four local mines in different parts of the district failed to report.

There are no objectionable features about this report and it requires less time to make it than must be given to reports furnished the inspectors in other mining states. It only relates to coal production, number of miners and others employed, number of days the mine worked and a statement of accidents, if any, and I know, from personal observation, that in any rightly regulated mine office the data for any one mine can be compiled in fifteen minutes.

We have no law requiring the operator to make a report to the mine inspector. Nearly all the other mining states have laws, more or less strict and explicit, covering this matter. The Pennsylvania law provides for yearly reports to be made on or before the twenty-fifth day of January and covering the year preceding. The report shall be in such form and give such information regarding a mine as may from time to time be required and prescribed by the inspector of the district. The Kansas law provides for quarterly statements to the mine inspector, not later than ten days after the end of each quarter. The report shall state amount of coal mined, number of miners employed, number of daymen, number of boys, number of days worked, accidents, serious and fatal, and wages paid. The Missouri law prescribes what information must be furnished and provides that the report must be made by the twentieth day of January for the preceding year. Failure to make the report is punishable by a fine of from one hundred to three hundred dollars.

It is very probable that the Iowa legislature, after prescribing that the mine inspector shall make a report to the Governor, will provide the means necessary to facilitate the making of such report, but compulsory legislation

on this point should not be necessary and will not be needed if the operators, who were either slow in making the report or failed to report, will realize that it is preferable to comply with a fair and reasonable request voluntarily, than to be compelled to do so by law.

During the biennial period just closed 493 inspections of the mines in this district were made and twenty-eight scales were tested, and I can say that nearly all the operators have tried to maintain the mines and their equipments in satisfactory condition and that in most cases they have been successful in their efforts.

Nothing occurred in the last two years to disturb the friendly relations existing between the miners and operators. In April, 1904, the miners were idle for a few weeks, but as soon as the wage scale, to prevail until April 1, 1906, was agreed to, work was resumed.

During the biennial period ending June 30, 1903, the mines of the district, as now constituted, produced 4,232,253 tons of coal; during the biennial period just closed the coal production amounted to 4,742,830 tons, showing a gain of 510,577 tons in the last two years. During the year ending June 30, 1904, 2,395,470 tons were mined, and last year's output was 2,347,360 tons.

The following tables give in compact form the number of mines in the counties comprising the district, their coal output and the number of persons employed in the coal industry.

Number of mines in operation in each county, their coal output, number of miners and other employees in District No. 1, for the year ending June 30, 1904.

County.	Number of mines.	Tons of coal of all grades produced.	Number of miners.	Number of other inside employees.	Number of outside employees.	Total number employed.
Appanoose .....	82	895,760	2,405	547	390	3,342
Monroe (part) .....	12	1,118,548	1,847	453	295	2,695
Lucas .....	8	230,384	888	174	50	1,112
Wayne .....	10	95,434	275	70	43	388
Taylor .....	7	18,820	51	10	6	67
Page .....	4	17,400	86	20	15	121
Adams .....	18	15,185	110	9	15	134
Total .....	181	2,395,470	4,722	1,818	761	6,796
Mines in District No. 1 connected with railroads .....	74	2,275,619	4,267	1,249	665	6,173
Mines local or without railroad connections .....	57	119,851	455	78	96	624
Total .....	131	2,395,470	4,722	1,818	761	6,796

Number of mines in operation in each county, their coal output, number of miners and other employees in district No. 1, for the year ending June 30, 1905.

County.	Number of mines.	Tons of coal of all grades produced.	Number of miners.	Number of other inside employees.	Number of outside employees.	Total number employed.
Appanoose.....	91	895,480	2,487	688	400	3,520
Monroe (part).....	18	1,129,857	1,588	550	237	2,370
Lucas.....	4	165,256	805	154	56	518
Wayne.....	10	104,873	884	79	42	455
Taylor.....	9	15,651	88	21	12	121
Page.....	4	17,166	79	18	9	101
Adams.....	15	19,577	184	18	18	165
Total.....	146	2,847,860	5,010	1,468	777	7,250
Mines in district No. 1 connected with railroads.....	80	2,228,022	4,472	1,367	678	6,517
Mines local or without railroad connections.....	66	124,398	538	96	99	733
Total.....	146	2,847,860	5,010	1,468	777	7,250

### GENERAL CONDITIONS OF THE MINES IN THE FIRST DISTRICT.

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In all the new mines opened during the last two years and in many of the older ones, a decided improvement in the system of working them is apparent. This has been made especially manifest in the last year, for while the working time of the mines during the year ending June 30th last was generally considerably less than in recent preceding years, there was but little decrease in the coal output of the district. It is a well known fact that the mining of coal in Iowa very often must be carried on under difficult conditions, such as do not exist in Illinois and the great mining states of the East and South. There the operator may determine even before he opens his mine how its workings shall be arranged and how future development shall be made and nature seldom interferes to prevent the carrying out of his plans. The Iowa mine operator may also have well-considered plans for the opening and working of his mine, but in trying to put his plans into practice he will very likely meet conditions that will completely upset them and force him to rearrange his work to suit these conditions and overcome the difficulties before him as well as he may. That improvements in mining methods under such circumstances can not be easily obtained is readily understood, and that appreciable advance has been made in that direction shows that the progressive and enterprising Iowa mine operator is making the best of his opportunities. Greater care is now shown to avoid the penalty that is exacted from every operator who strives for the largest immediate returns possible, without due consideration and preparation for meeting the future needs of the mine. Mine haulage has been improved, shaft bottoms have been arranged to permit the easier and more rapid handling and caging of coal and improvements on top have kept pace with those made below.

The hoisting machinery at the mines was generally found to be in satisfactory and safe condition. In a few cases I found that hoisting ropes, showing visible signs of injury to the wires, had been permitted to remain in use. The fact that the safety devices were in good working order and would prevent injury to persons conveyed through the shaft, should the rope break, does not warrant the use of defective ropes. Every part of the hoisting apparatus should be kept at all times in the best possible condition, and it is not good mine management to have it otherwise.

In a number of the larger mines using mechanical haulage, separate and convenient traveling roads have been provided and considerable money has been spent to put them in available condition. It may not be practical to provide such separate traveling roads in all mines using mechanical haulage, but if this can not be done, and the haulage roads must be used for travel, there should be adequate safeguards provided to protect the

workmen from injury by the moving cars. Fortunately during the last two years no miner or other underground employe has been injured while going to or from his place of work. This is a pleasing fact, but is not proof that the traveling roads are now about as safe as they can be made and that further efforts to increase the safety of underground travel are not needed.

The escape shafts have been kept in fairly available condition, but in some of the drift and slope mines of Appanoose county the escape roads were found to be badly kept. Improvements have been made, however, and will continue, until all these roads are put in such condition as the law prescribes.

Mine stables are now better located and safer than ever before. Stables have been removed from out of the way places to locations where constant supervision is possible, the danger from fire occurring in them has been lessened, and should one occur, means have been provided to subdue it in its incipency and prevent the smoke reaching the men at work in the mine.

An unusual amount of outside mine property was destroyed by fire during the last two years. On August 19, 1903, the tippie, engine-room, boiler house and blacksmith shop of No. 3 mine of the Centerville Block Coal Company burned down. On August 29th of the same year, the engine-house and part of the trestlework belonging to the Egypt Coal Company was destroyed. The top works of the Star mine in Centerville burned December 11, 1904. On January 7, 1905, the engine and boiler-house of No. 2 mine of the Exline Coal Company was destroyed. The Wapello Coal Company lost the engine and boiler-house of mine No. 4 on January 25, 1905, and on February 4th the top works of mine No. 1 of the Hocking Valley Coal Company burned down. No lives were placed in danger at any time on account of these fires, and operation of all these mines was resumed as soon as the buildings were replaced.

The work done and the improvements made in the last two years to render the mines safe and furnish fair sanitary conditions to the mine workers have been of considerable scope. I am pleased to state that a large amount of this work was done without any urging on my part, and in a few instances only did some operator or mine official show neglect or unwillingness to comply with my request to put and maintain his mine in fairly satisfactory condition.

#### MINE VENTILATION.

The expectation expressed in my last report that a material improvement in the ventilation of the mines of this district would likely come about in the biennial period just closed, has been realized to a gratifying extent. It is true, there are mines in this district at this time that are not satisfactorily ventilated, but their number is considerably less than it was two years ago and will be still further reduced as rapidly as circumstances will permit. The reason that in the latter cases better progress was not made, was due to the fact that the mines either had not been properly opened and arranged for future needs, or that natural drawbacks and difficulties existed, or that neglect and incompetency in the past on the part of the mine management made the obtaining of immediate satisfactory results very difficult, if not impossible.

It is evident that the operators realize more than ever before the importance of good mine ventilation and the benefits derived from it. Generally they have shown an earnest desire to improve their mines in this respect, and, in some instances, by the use of up-to-date methods, they have succeeded remarkably well.

All the mines in Monroe county (thirteen), belonging in this district, have fan-ventilation. In Appanoose county thirty mines are ventilated by fans, in Lucas county three, and in Wayne county two. The increase in the number of fans in use during the last two years over the number in use during the preceding biennial period, was seven. Nineteen mines (eighteen of them in Appanoose county), with an individual yearly production ranging from 5,000 to 30,000 tons of coal, were ventilated by furnaces. Nearly all the remaining small mines use furnaces, while some of the rather unimportant country mines, working only in the winter season, depend on natural ventilation.

All the new shipping mines, recently opened in this district, have been provided with air shafts of fair dimensions, fans have been or will be erected on them, and the underground workings have been so arranged with regard to future requirements that, with ordinary care and attention, satisfactory ventilation can be had in these mines for years to come.

#### SCALES.

The mine scales in the district have been kept in fair weighing condition, and if the decreasing number of tests called for is any criterion there has been material improvement in this respect. In the first fifteen months of my work in this district, I tested twenty-three scales, in the year ending June 30, 1904, sixteen, and during last year, twelve. Of the twenty-eight scales tested in the last two years, twenty were found correct and eight required adjustment.

#### SHOT EXAMINERS AND THEIR WORK.

In my judgment, the shot examiners employed in this district are competent men, a number of them having served with marked efficiency ever since the shot examination law took effect and the record shows that they have done good work. In one or two mines changes in the examining force have been rather too frequent. This frequent change should be avoided, if possible, for it is undoubtedly a correct proposition that the longer a shot examiner of fair ability stays in service, the more reliable will be his judgment and the more competent he will become.

The shot examination law has been in force now for more than three years. In the two years preceding the taking effect of the law, attempts had been made to do the blasting with greater safety and shotfirers were employed in some of the mines in this district. Little attention, however, was given to the examination of shots prior to firing them, and during these two years five explosions occurred in the mines employing shotfirers. Six shotfirers lost their lives in these explosions and two were rescued just in time to save them. In the three years following the enactment of the law, with more thorough examination and better safeguards provided, one explosion occurred, resulting in the loss of two lives.

The benefits of the law have been clearly established in Iowa, and its merits have been recognized in other mining states.

#### FATAL AND SERIOUS ACCIDENTS.

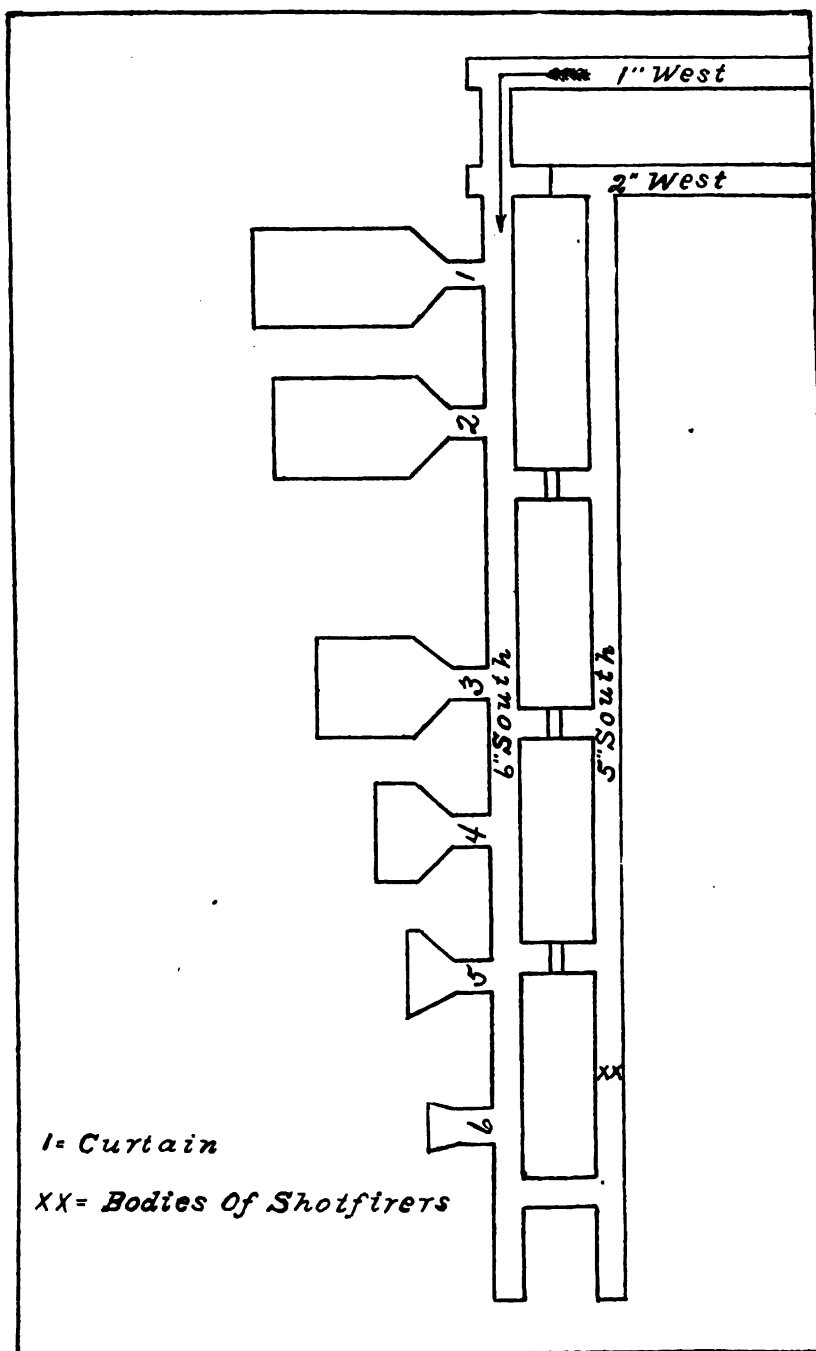
During the year ending June 30, 1904, thirteen fatal and twenty-eight serious accidents occurred in and about the mines of this district. Of the thirteen men killed, seven lost their lives by falls of roof or coal, two were killed by timber or rock falling down the shaft, two by an explosion, one was overcome by damp and one was crushed by a cage. Fifteen of the serious accidents were due to falls of roof or coal, ten persons were injured by cars on the haulage roads, one was caught in a flywheel, one was injured by a cage and one lost an eye through a chip from a steel wedge entering it.

In the last year seven fatal and thirty-two serious accidents were reported. Five of the fatal accidents occurred at the working face and were due to falls of roof or coal, one man was killed by falling down a shaft and one was fatally injured by being crushed between a car and timber on top of the shaft of the Big Jim mine. Twenty-one of the serious accidents were caused by falls of roof or coal, ten persons were injured on the haulage roads and one was injured while descending on the cage by being struck by a part of a safety gate.

In the year ending June 30, 1904, the fatal accident rate per 1,000 employes was 1.9. Last year it was .96.

It seems to be unnecessary to review in detail all of the above accidents, but believing that all available information regarding explosions occurring in this State should be presented, in order that such information may be of some assistance to suggest means to prevent them in the future, I give the results of my investigation of the explosion which occurred on January 25, 1904, in mine No. 6, of the Phillips Fuel Co.

Two lives were lost in this explosion. A. Carlson, the shot examiner and shotfirer, and his assistant, J. W. Stevens, were the victims. Their dead bodies were found on the fifth south entry (see sketch). There is no doubt about the explosion's starting point. It originated in room 6 on the sixth south entry and its occurrence, in my judgment, was largely due to the fact that the shot examiner apparently only considered the shots prepared in the sixth south entry separately as to their safety and failed to recognize the danger that existed in the injudicious manner of firing the shots located in a part of the mine extremely limited in space. The shot which caused the explosion, considered by itself, would probably have been accepted as reasonably safe by any other shot examiner in the district, and, in my judgment, fired by itself, although containing too much powder for the work done, would not have caused any harm. I believe it was a combination of dangerous conditions existing in and about room 6 when this shot was fired, that made the explosion possible and it was a failure on the part of the shotfirers to notice the existence of these threatening conditions that cost them their lives.



The ventilation in the fifth and sixth south entries was generally good, but as at the request of the shotfirers the fan was stopped when the miners were leaving the mine, there was little, if any, air movement at firing time. It was found that no rooms had been turned on the fifth south entry and that rooms 1 and 2 on the sixth south entry were not working, that shots had been prepared and fired in rooms 3, 4, 5 and 6 and in the sixth south entry and that one shot had been prepared and left unfired in the fifth south entry. It was also established that two shots were fired in room 6. The shotfirers evidently commenced lighting the shots in room 3, and proceeding southward they probably touched off the fuses of the shots in room 6 and the entry at the same time, retiring through the last crosscut to the fifth south entry.

That the explosion originated in room 6 was shown by the fact that, while the loose coal at the mouth of room 5 and the coal thrown by the entry shot was covered with soot and dust, room 6 and its immediate vicinity presented a clean appearance as if it had been swept with a broom. The explosion's force was comparatively small and very little coked dust was found and that only in the immediate vicinity of room 6.

It is, of course, impossible to establish the exact co-relation of forces that brought on the explosion. As it is customary to so regulate the length of fuses, when more than one shot is fired in a place, that the shots may not explode at the same time, it is not probable that the two shots in room 6 exploded together. I believe the shot fired in the sixth south entry was the main factor contributing to the explosion's origin. It was proved that this shot exploded prior to the shot in room 6, the difference in time being very slight and may not have exceeded the fractional part of a second. That being the case, we have this situation: The pressure from the entry shot momentarily retards the dissipation of the heated gases coming from the shot in room 6, their heat is increased and intensified in consequence, additional and ready fuel is provided by the dust swept out of the face of the entry past the mouth of room 6, and the explosion is the result.

The explosion could have been prevented; at any rate there should have been no loss of life. The shotfirers erred in considering the fifth south entry a safe retreat. In close workings shotfirers should never remain on the entry while the shots are being fired close by; it means certain death should any of these shots cause even a slight explosion. They erred also in the manner of lighting the shots; they should have fired the entry shots first, commencing on the fifth south entry. They should have waited until these shots had done their work and then fired the room shots in the sixth south entry, starting in room 6. Their place of retreat should have been room 1 on the sixth south entry.

## Fatal accidents in District No. 1, July 1, 1903—June 0, 1904.

Date.	Name of Deceased	Occupation.	Cause of Death.	Employed by—	County.
September 12, 1903	D. Jenkins	Timberman	Fall of slate	Wapello Coal Co.	Monroe.
December 8, 1903	P. Halsey	Miner	Fall of slate	G. Howard	Paga.
December 8, 1903	P. Stancovich	Miner	Fall of slate	Floating Coal Co.	Monroe.
January 1, 1904	C. Vihars	Miner	Struck by plank in shaft	Johnson & Co.	Paga.
January 16, 1904	Wm. Webster	Miner	Fall of black bat	Hocking Valley Coal Co.	Appanoose.
January 20, 1904	P. E. Carlson	Miner	Crushed by cage	Hocking Coal Co.	Monroe.
January 25, 1904	J. W. Stevens	Miner	Explosion	Phillips Fuel Co.	Monroe.
January 28, 1904	J. Carlson	Shotfirer	Explosion	Phillips Fuel Co.	Monroe.
January 28, 1904	Geo. Shuler	Miner	Fall of black bat	Perkins Coal Co.	Appanoose.
February 20, 1904	J. A. McQuinn	Miner	Struck by rock while crossing shaft	Norfolk Coal Co.	Wayne.
February 21, 1904	Jas. A. John	Miner	Overcome by damp	Big Hill Coal Co.	Monroe.
March 23, 1904	W. H. Mitchell	Miner	Fall of slate	Wapello Coal Co.	Monroe.
May 30, 1904	S. Vedo	Miner	Fall of slate	Smoky Hollow Coal Co.	Monroe.

## Serious accidents in District No. 1, July 1, 1903—June 30, 1904.

Date.	Name of Injured.	Occupation.	Character of Injury.	Cause of Injury.	Employed by—	County.
July 9, 1903	Ed Brook.	Driver	Arm broken	Caught between cars.	Smoky Hollow C. Co.	Monroe.
July 18, 1903	Fred Taylor.	Driver	Leg broken.	Run over by car.	Whitebreast Fuel Co.	Lucas.
August 22, 1903	B. Kauzasky.	Miner	Spine injured.	Fall of slate.	Thistle Coal Co.	Appanoose
September 9, 1903	T. Lewis.	Driver	Arm broken	Thrown from car.	Big Hill Coal Co.	Lucas.
September 10, 1903	J. Swanson	Driver	Nose and jaw broken	Kicked by mule	Smoky Hollow C. Co.	Monroe.
September 18, 1903	Wm. Holland.	Engineer	Four ribs broken	Struck by flywheel.	Ill and Iowa Fuel Co.	Appanoose
September 19, 1903	A. Nelson.	Miner	Leg broken	Fall of coal	Dewey Coal Co.	Appanoose
October 4, 1903	Jas. Burt, jr.	Driver	Leg broken	Mule ran away	Hoeking Valley C. Co.	Appanoose
October 21, 1903	R. Snodgrass.	Miner	Leg broken	Fall of slate	Smoky Hollow C. Co.	Monroe.
November 11, 1903	F. Reed.	Miner	Leg broken	Fall of coal	Domestic Coal Co.	Appanoose
November 14, 1903	R. Wranth	Miner	Leg broken	Fall of slate	Ill and Iowa Fuel Co.	Appanoose
November 16, 1903	R. Zimmermann	Miner	Arm broken	Caught by cage	Whitebreast Fuel Co.	Monroe.
December 12, 1903	T. Brennan	Teamman	Leg broken	Run over by car.	Whitebreast Fuel Co.	Lucas.
December 24, 1903	H. Miles	Trapper	Hips injured	Fall of coal	Whitebreast Fuel Co.	Lucas.
December 26, 1903	J. Grunoo	Miner	Arm broken	Fall of slate	Whitebreast Fuel Co.	Appanoose
January 13, 1904	C. Nechem	Driver	Arm broken	Fall of slate	Whitebreast Fuel Co.	Lucas.
January 20, 1904	E. Gulliane	Laborer	Bone in ankle broken.	Fall of slate	Whitebreast Fuel Co.	Lucas.
January 26, 1904	E. Hines	Miner	Three fingers cut off	Fall of slate	Smoky Hollow C. Co.	Monroe.
February 9, 1904	Wm. Hall	Miner	Leg broken	Caught between cars.	Smoky Hollow C. Co.	Monroe.
February 20, 1904	C. Ebbitt	Driver	Thumb cut off	Fall of coal	Big O Coal Co.	Appanoose
March 1, 1904	J. Easley	Miner	Leg broken	Fall of slate	Anchor Coal Co.	Appanoose
March 2, 1904	Jas. Dawson.	Miner	Jaw and nose broken.	Fall of slate	Dewey Coal Co.	Appanoose
March 9, 1904	W. Alderman.	Miner	Leg broken	Fall of slate	Smoky Hollow C. Co.	Monroe.
March 12, 1904	F. Hand	Pit boss	Back injured	Fall of coal	Hoeking Valley C. Co.	Appanoose
March 14, 1904	J. Bassaco.	Miner	Loss of eye.	Struck by piece of steel	Hoeking Valley C. Co.	Appanoose
May 2, 1904	P. Jackson.	Driver	Finger cut off	Car jumped track	Smoky Hollow C. Co.	Monroe.
June 11, 1904	J. Miles	Miner	Ribs broken	Fall of coal	Big O Coal Co.	Appanoose
June 23, 1904	C. Phillips	Coupler	Leg broken	Caught between cars	Whitebreast Fuel Co.	Lucas.

## Fatal accidents in District No. 1, July 1, 1904—June 30, 1905.

Date.	Name of Deceased.	Occupation.	Cause of Death.	Employed by—	County.
October 21, 1904	F. Fellinski.	Miner.	Fall of coal.	Orr Bros.	Appanoose.
January 4, 1905	Ed. Green.	Trap boss.	Crushed by car.	Norris Black Coal Co.	Wayne.
February 9, 1905	P. Gallo.	Miner.	Fell down shaft.	Norris Coal Co.	Appanoose.
March 28, 1905	Thos. Davis.	Miner.	Fall of slate.	Phillips Fuel Co.	Appanoose.
May 19, 1905	Thos. Dwyer.	Miner.	Fall of slate.	Wells Coal Co.	Monroe.
June 20, 1905	C. F. Carter.	Miner.	Fall of slate.	Whitcomb Fuel Co.	Lucas.
June 20, 1905	L. Jones.	Miner.	Skull broken by post.	Hocking Coal Co.	Monroe.

Serious accidents in District No. 1, July 1, 1904—June 30, 1905.

Date.	Name of Injured.	Occupation.	Character of Injury.	Cause of Injury.	Employed by—	County.
July 31, 1904	J. Sonoras.	Miner.	Back dislocated.	Fall of slate.	Hocking Coal Co.	Monroe.
July 29, 1904	H. Kephart.	Miner.	Head and hips hurt.	Fall of slate.	Smoky Hollow C. Co.	Monroe.
August 20, 1904	J. E. Fargo.	Miner.	Leg broken.	Fall of slate.	Smoky Hollow C. Co.	Monroe.
August 24, 1904	J. O. E. Starkey.	Miner.	Ankle broken.	Fall of slate.	Smoky Hollow C. Co.	Monroe.
August 26, 1904	A. Kisela.	Miner.	Leg broken.	Fall of slate.	Smoky Hollow C. Co.	Monroe.
August 26, 1904	A. Waldeen.	Driver.	Ankle broken.	Run over by car.	Whitebreast Fuel Co.	Lucas.
November 12, 1904	J. B. Williams.	Miner.	Contraction of leg muscles.	Fall of coal.	Hocking Coal Co.	Monroe.
November 14, 1904	E. Houston.	Driver.	Dislocation of spine.	Run over by car.	Mendota C. & M. Co.	Appanosee
November 16, 1904	F. McVetty.	Trapper.	Leg crushed.	Run over by car.	Hocking Coal Co.	Monroe.
November 22, 1904	J. Moyle, Jr.	Miner.	Leg broken.	Fall of slate.	Smoky Hollow C. Co.	Monroe.
December 1, 1904	J. Maseley.	Driver.	Leg broken.	Run over by car.	Big Hill Coal Co.	Lucas.
December 23, 1904	A. Roberts.	Laborer.	Leg broken.	Fall of rock.	Numa Block C. Co.	Wayne.
December 29, 1904	T. C. Mongar.	Miner.	Spine dislocated.	Fall of slate.	Skidmore Bros.	Lucas.
December 31, 1904	N. Weeks.	Miner.	Leg broken.	Fall of coal.	Peacock Coal Co.	Appanosee
January 8, 1905	S. Bragg.	Miner.	Ankle broken.	Fall of coal.	Numa Block C. Co.	Wayne.
January 15, 1905	H. Bilterman, Jr.	Driver.	Arm and legs bruised.	Struck by car.	White Ash Coal Co.	Monroe.
January 18, 1905	C. Grenko.	Miner.	Leg broken.	Fall of coal.	Mann's C. & C. Co.	Appanosee
January 16, 1905	J. Rajick.	Miner.	Hips crushed.	Fall of rock.	Whitebreast Fuel Co.	Monroe.
January 20, 1905	D. Nelson.	Miner.	Ribs broken.	Fall of slate.	Star Coal Co.	Monroe.
February 1, 1905	D. Wright.	Miner.	Collar bone broken.	Struck in shaft.	J. Shirey.	Appanosee
February 4, 1905	R. Greathouse.	Miner.	Two fingers cut off.	Fall of slate.	Oriental Coal Co.	Appanosee
February 10, 1905	A. Parker.	Laborer.	Leg broken.	Fall of slate.	Wapello Coal Co.	Monroe.
February 20, 1905	C. Nating.	Miner.	Hip dislocated.	Struck by car.	Centerville B. C. Co.	Appanosee
February 20, 1905	W. Milligan.	Driver.	Shoulder dislocated.	Fall of coal.	Smoky Hollow C. Co.	Monroe.
February 25, 1905	J. Coop.	Top laborer.	Leg broken.	Struck by car.	Mendota C. & M. Co.	Appanosee
February 27, 1905	J. Specks.	Miner.	Leg broken.	Fall of slate.	Whistle Coal Co.	Appanosee
April 24, 1905	J. Wester.	Laborer.	Collar bone and ribs broken.	Fall of slate.	Star Coal Co.	Monroe.
April 24, 1905	Wm. Brown.	Timberman.	Ribs broken.	Fall of slate.	Appanosee C. & F. Co.	Monroe.
June 6, 1905	Wm. Bates.	Miner.	Hip injured.	Fall of bat.	Wapello Coal Co.	Appanosee
June 10, 1905	M. Bates.	Miner.	Leg broken.	Fall of slate.	Whitebreast Fuel Co.	Monroe.
June 20, 1905	T. D. Evans.	Driver.	Hand broken.	Caught by car.	Whitebreast Fuel Co.	Lucas.
June 23, 1905	D. Harvey.	Driver.	Foot crushed.	Caught between cars.	Whitebreast Fuel Co.	Lucas.

**Fatal and serious accidents in District No. 1, July 1, 1903, to June 30, 1904, with relation to coal produced and number of employees.**

County.	Number of Accidents.		Number of Tons of Coal Produced.	Tons of Coal Produced for Each Accident.		Number of Employees.	Number of Employees for Each Accident.	
	Fatal.	Serious.		Fatal.	Serious.		Fatal.	Serious.
Appanoose .....	2	12	895,759	447,879	74,648	3,372	1,686	297
Monroe (part) ..	7	10	1,118,548	159,792	111,854	2,096	299	309
Lucas .....	1	6	239,584	239,584	59,897	621	621	108
Wayne .....	1	.....	95,424	95,424	.....	587	587	.....
Taylor .....	.....	.....	13,520	.....	.....	67	.....	.....
Page .....	2	.....	17,400	8,700	.....	119	59	.....
Adams .....	.....	.....	15,185	.....	.....	134	.....	.....
<b>Total .....</b>	<b>13</b>	<b>28</b>	<b>2,395,470</b>	<b>184,267</b>	<b>85,552</b>	<b>6,796</b>	<b>538</b>	<b>248</b>

**Fatal and serious accidents in District No. 1, July 1, 1904, to June 30, 1905, with relation to coal produced and number of employees.**

County.	Number of Accidents.		Number of Tons of Coal Produced.	Tons of Coal Produced for each Accident.		Number of Employees.	Number of Employees for each Accident.	
	Fatal.	Serious.		Fatal.	Serious.		Fatal.	Serious.
Appanoose .....	2	9	895,480	447,740	99,498	2,530	1,760	291
Monroe (part) ..	3	16	1,129,337	376,452	70,535	2,370	790	148
Lucas .....	1	6	165,255	165,255	55,051	518	518	104
Wayne .....	1	2	104,373	104,373	52,436	455	455	227
Taylor .....	.....	.....	15,651	.....	.....	121	.....	.....
Page .....	.....	.....	17,166	.....	.....	101	.....	.....
Adams .....	.....	.....	19,577	.....	.....	165	.....	.....
<b>Total .....</b>	<b>7</b>	<b>33</b>	<b>2,347,860</b>	<b>835,387</b>	<b>73,355</b>	<b>7,250</b>	<b>1,066</b>	<b>226</b>

## THE NEED OF NATIONAL ASSISTANCE IN THE PREVENTION OF MINE ACCIDENTS.

About thirty-five years ago the first steps were taken in Pennsylvania to bring its anthracite mines under State supervision. Since that time all the principal coal producing states have adopted laws regulating the operation of coal mines within their borders, with the view of securing an increased measure of safety for the persons employed therein, and officials have been provided by these states to see that the requirements of these laws are complied with. Under State supervision the sanitary condition of the mines has been much improved, appliances and devices affording the miner greater safety and facility in entering or leaving the underground workings, are in evidence everywhere, efforts have been and are being made by the different State governments to give reasonable protection to the miner, while at work, yet, notwithstanding all this, the yearly death rate due to accidents in the coal mines of the United States remains alarmingly high, and judging from the evidence of recent events, there seems to be little hope, under the present order of things, that the future will show any appreciable reduction in this respect.

It appears that this state of affairs can only be accounted for in two ways: there is either a lack of knowledge as to what is required to make the mines more safe, or, such knowledge existing, willful and criminal negligence must be the cause. That some mine accidents have been due to neglect, and that in a very few instances this neglect may have been almost criminal, is probably true, but there is absolutely no foundation to sustain the charge that the high rate of mine fatalities in the United States in recent years has been due to widespread and universal neglect to provide adequate means for their prevention. There is no reason for believing that the mine operator in America is less humane than the mine operator in England or Germany, or that he feels less concern for the welfare and safety of the persons in his employ, and the only conclusion that presents itself is that it is not neglect but lack of sufficient knowledge of the hidden dangers of the mines that stands out as the obstacle that must be overcome before there can be hope for an appreciable reduction in the number of mine accidents in the United States. It is a true proposition that in order to overcome danger successfully, its existence, cause and nature must be well understood.

One of the principal causes of the high fatality rate in the mines of the United States has been due to the alarming frequency of disastrous explosions in mines containing little or no firedamp. After the occurrence of one of these so-called dust explosions the charge is often made and generally accepted as true, that the explosion was caused by carelessness, negligence or disregard of mining laws and mine rules. The truth is, that possible negligence, carelessness, etc., were only contributory factors and that the main cause, the principal factor that made it possible for such explosions to follow each other in rapid succession from Utah to Pennsylvania and from Iowa to Alabama, was inability to recognize and understand the existence of the danger.

It was not neglect of any kind, it was lack of information and knowledge regarding these explosions that caused the loss of two hundred lives in the mines at Scofield, Utah. The miners going to their work on the morning of May 1, 1900, were apparently confident that the mine they were entering was as safe as any mine in the United States; they, no doubt, believed that, with the exercise of ordinary care and watchfulness in doing their work at the face, no serious mishap would befall them, the mine officials believed that everything was all right, yet a few hours later the mine was wrecked and two hundred lives were lost. The surviving miners and the mine officials could not understand it, they could not account for this great calamity. Mining had been carried on in that locality for a number of years, with only the ordinary loss of life incident to mining, mine No. 4, where the explosion originated was in good condition, well ventilated and the requirements of the mining law had been fully complied with. Men with extensive experience in mines and mining, who worked in this mine, testified that it was free from gas, that they never thought of the possibility of an explosion and that they considered the mine perfectly safe. Why were these men and mine officials ignorant of the dangerous condition of the mine, why did they feel so secure, when a long record of explosions in other mines in different parts of the country, apparently as safe as this one, should have impressed upon them the need of caution and sufficient investigation to ascertain whether or not their mine really was as safe as they believed it to be? Why did they not profit by the lessons of disaster presented in other states? Presumably it was for the same reason that prevented Iowa, Tennessee, West Virginia, Alabama and other mining states from deriving any benefit from the lesson taught by the great calamity of Scofield, Utah. The opportunity to secure this benefit was lacking.

The good results coming from the centralizing of efforts to lessen the hazard to life incident to mining are readily recognizable in England, Germany and other coal producing countries of Europe, and it is a matter of regret that so far no efforts have been made in the United States to profit by their example. If these explosions are to be averted in the future, as I believe they can be, and a general safer condition of the mines brought about, it must be done through the assistance of the National Government and by the creation of a National bureau of mine accidents. The scope of such bureau should include the furnishing of statistics relating to mine accidents occurring in the United States, the investigation of all accidents through which a number of lives were lost, the special investigation of every explosion, the making of tests and experiments and the providing of useful information and advice. This bureau should be a central source of education and information, of such reliability and trustworthiness, that its teachings and advice will be readily accepted and followed by the mining interests and governments of every mining State and Territory in the Union. The United States, producing nearly two-fifths of the world's annual coal supply, with its widely spread coal fields with their diverse conditions and mining methods, with inspection service in every mining State, affords unequalled opportunities for successful work by the government experts, with the almost sure promise that results will be entirely satisfactory to all.

The plea that the individual mining states can deal with this question successfully, is no longer tenable. The proof to the contrary is too overwhelming. Individual efforts are too uncertain and often futile, there must be co-operation to get results and get them quickly, and such co-operation can only be carried on successfully with the help of the National Government. For humane as well as economic reasons the question of the creation of a National bureau of mine accidents should receive the early and favorable consideration of Congress.

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### APPANOOSE COUNTY.

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Last year ninety-one mines were operated in Appanoose county. Sixty-two of these mines are connected with the railroads running through the county. Twenty-six mines are connected with the Chicago, Milwaukee & Saint Paul railroad, twenty-five with the Burlington, two with the Iowa Central and nine with the Chicago, Rock Island & Pacific. The remaining twenty-nine mines have no railroad connections and are generally operated in a small way to supply home demand, although a few of them ship part of their output.

The majority of the mines were operated a less number of days last year than the preceding year, and no surprise would have been felt had last year's coal output shown a material decrease. The loss in production, however, was very insignificant, and amounted to less than three hundred tons. The increase in tonnage in a number of mines, together with the additional output of new mines opened, nearly balanced the losses.

Two mines were abandoned and six shipping mines and five local mines were opened during the last two years.

The Illinois & Iowa Fuel Company closed its mine at Forbush last May, and a small mine near Exline, belonging to the White Oak Coal Company was abandoned last fall.

Of the new mines opened, mine No. 2, operated by the Scandinavian Coal Company, is located near Plano, on the Keokuk & Western railroad. It is substantially equipped, well arranged, has second opening, and is ventilated by a force fan fourteen feet in diameter.

The Exline Coal Co. experienced considerable difficulty in opening its No. 2 mine, located about three-fourths of a mile west of Exline, and about one-fourth mile east of mine No. 1. The shaft was sunk in a fault, and for a time it seemed that it would have to be abandoned, but good coal has been reached and the mine is now being developed. It is in good condition and the requirements of the law are fully complied with.

The Iowa Block Coal Co. opened a mine east of Exline, but the coal proved somewhat faulty and development work has been progressing but

slowly. An air and escape shaft has been sunk and connected with the workings and fan ventilation will be used.

The Prairie Block Coal Co. has opened a shaft mine on the Rock Island railroad, between Shawville and Numa, and has recently completed its air and escape shaft.

The Center Coal Co.'s. new shaft is located south of Centerville and connected with the Rock Island railroad. It is in good condition and provided with the safety devices the law requires. The sinking of the air and escape shaft is now progressing.

The Appanoose Coal and Fuel Co. opened a shaft mine near Diamond, on the Milwaukee railroad. It will have fan ventilation and mining machines, run by electricity will be used.

Of the five local mines recently opened, one is located in Centerville, two north of Exline, one north of Cincinnati and one east of Seymour.

In order to show what has been accomplished and the conditions prevailing at the close of this biennial period in the mines of Appanoose county, the following brief summary is given.

Appanoose Coal & Fuel Co. Mine No. 3. Has been somewhat improved during the last two years and, with care, can be kept in fairly satisfactory condition.

Walnut Block Coal Co. The mine is now worked on a small scale. Considerable improvements must be made before its output can be materially increased.

Phoenix Coal Co. Mechanical haulage has been substituted for mule haulage; the furnace has been enlarged and placed to better advantage. Mine in fair condition.

Centerville Block Coal Co. Mine No. 5. The ventilation, although improved and fairly satisfactory at present, should be made more efficient by providing means to increase the air volume going through the mine. The mine is in fair physical condition.

Tipton Co-operative Coal Co. Mine worked on a small scale and will probably soon be exhausted.

Peacock Coal Co. Mine in fair condition.

Oriental Coal Co. Mine in fair condition.

Keystone Coal Co. Mine in fair condition.

Centerville Block Coal Co. Mine No. 3. The escape shaft has been retimbered. Air volume too small for the needs of the mine. Under existing conditions it has proved a difficult task to better the ventilation materially, but some progress has been made in that direction. It is the intention of the management to sink an air shaft as soon as the east workings have advanced far enough to admit of its location with advantage to the mine and its future development.

Anchor Coal Co. Mine No. 1. The hoisting shaft has been enlarged and retimbered. By enlarging the air shaft also ventilation has been improved, although the north workings are not yet in satisfactory condition in that respect. Otherwise the mine is well cared for.

Scandinavian Coal Co. Mine No. 1. An additional air and escape shaft, located near the head of the workings, was recently completed, improving the ventilation and adding to the safety of the mine.

Dewey Coal Co. Mine in fair condition.

Hocking Valley Coal Co. Mine No. 4. Ventilation slack. As soon as a shaft, already sunk, is reached and a suitable furnace built at the bottom of it, the ventilation can be kept in satisfactory condition.

Hocking Valley Coal Co. Mine No. 1. Fair sized air shaft has been sunk. The mine was idle for several months after the dump and other buildings burned down, February 4, 1905, and the workings have suffered in consequence. After the damage has been repaired, the mine can be maintained in fair condition.

The Albert mine, operated by the Mendota Coal & Mining Co., has been much improved in the last two years and is in satisfactory condition. Improvements were also noted in the Appanoose mine, belonging to the same company.

Thistle Coal Co. Mine No. 1. Air shaft completed and fan erected. Mine No. 2. Main air course thoroughly cleaned and mine otherwise improved. Mine No. 3. In fair condition.

Exline Coal Co. Mine No. 1. Fan ventilation has taken the place of ventilation by steam jet. Mine in good condition.

Centerville Block Coal Co. Mine No. 9. In good condition.

Centerville Block Coal Co. Mine No. 2. This mine has been greatly improved and conditions are satisfactory.

Numa Block Coal Co. Mine No. 1. Ventilation has been deficient, but recently the fan has been removed from the quarter shaft, which is very small, to a shaft of larger dimensions, and better results in that respect can be expected.

Anchor Coal Co. Mine No. 3. The ventilation is improved; top works have been remodeled and the mine is in satisfactory condition.

Anchor Coal Co. Mine No. 2. In fair condition.

Centerville Block Coal Co. Mines Nos. 1 and 10. These mines are connected and are in good condition. The boiler power has been increased, the hoisting shaft of mine No. 1 has been retimbered and a new fan erected on the air shaft of mine No. 10, furnishing satisfactory ventilation for both mines.

Consumers Coal Co. The mine is in fair condition, but on account of a small sized air shaft, inadequate power to drive the fan and the poor construction of the fan itself, it has been difficult in the past to provide satisfactory ventilation for the mine. This summer the air shaft has been enlarged, the fan is now being remodeled and improved and a more powerful fan engine will be used. The results will be entirely satisfactory.

Big Jo Coal Co. Mine No. 1. Some difficulty was experienced in ventilating the southeast workings successfully, but since the west side of the mine has been abandoned, with the air courses in somewhat better shape, more satisfactory results may be expected.

F. H. Juckett Coal Co. Mine in fair condition.

Appanoose Coal & Fuel Co. Mine No. 21. When the present owners acquired this mine, it was in poor condition. It had been worked in a haphazard way and the lack of system made progress in its improvement difficult and slow. Much work remains yet to be done to put the mine in satisfactory condition.

Peerless Coal Co. Mine No. 4. In fair condition.

Peerless Coal Co. Mine No. 5. In fair condition.

Egypt Coal Co. The mine needs more adequate means to ventilate it properly.

Peerless Coal Co. Mine No. 1. In fair condition.

Artic Coal Co. Mine in fair condition.

Acken Coal Co. Mines No. 1 and 2 are now ventilated by a fan and, with proper attention, can be kept in satisfactory condition.

Peerless Coal Co. Mine No. 2. In good condition.

Mystic Coal Co. Mine in fair condition. An additional escape shaft has been sunk.

J. Helme Coal Co. Mine fairly satisfactory.

Diamond Block Coal Co. Mine No. 29. Somewhat improved and in fair condition.

Peerless Coal Co. Mine No. 6. Mechanical haulage installed. Ventilation fair in the west part of the mine, somewhat deficient in the east portion. At present the mine has furnace ventilation, but fan ventilation should be substituted as soon as the east workings can be connected with the Mystic Block mine. The latter is already connected with the above company's No. 3 mine, and a fan erected at the Mystic Block mine opening could provide efficient ventilation for both mines.

Peerless Coal Co. Mine No. 3. In fair condition.

Diamond Block Coal Co. Mine No. 12. Slope has been retimbered. The present manway is not in good condition, and it either should be put in more available condition or a new manway should be provided. Ventilation fair.

Orr Bros. Coal Co. Mine in fair condition.

Diamond Block Coal company, mine No. 5. Much improved in the last two years. In good condition.

Star Coal company. Mine well ventilated and in good condition.

Unity Block Coal company. Mine in fair condition.

Manufacturers Coal and Coke company. Mine No. 30. In fair condition.

The local mines were generally found to be in safe condition. In a few cases ventilation was deficient, but as the mines are of small extent it was not difficult to remedy this and provide a satisfactory volume of air for them.

It is not generally realized that the coal wealth of Appanoose county is far greater than that of any other county in Iowa. Making due allowance for all the coal mined in this county since its first mine was opened and considering only the vein now worked, the county's future available coal supply can be safely placed at 250,000,000 tons, a supply lasting at the present rate of production, for more than 250 years. There is no danger of any of the coal mining towns in the county being vacated in the near future on account of the coal in their vicinity giving out. Taking the town of Mystic, for instance, and supposing that the present yearly output of all the mines located along the Milwaukee railroad from Darbyville to Jerome had to be produced from now on in Mystic and its immediate vicinity alone it will be possible, under such conditions, for the Mystic miner to walk to his work fifty years hence, and the average distance traveled by him to reach his work need not exceed two miles from the center of the town.

Of the sixty-two mines in Appanoose county having shipping facilities, sixteen are worked on the room and pillar plan and forty-six on the long-wall system. In fifteen mining machines are in use.

The mines are easily maintained in safe condition. The safe condition of the traveling roads used by the miners and others in going to and returning from their work, is shown by the fact that the 3,000 underground workmen in the county traveled through these passages during the last two years, every day the mines worked, without serious injury to one of them. What danger exists in these mines is generally encountered at the working face. There three fatal accidents occurred in the last two years, caused either by falls of black bat or coal.

Unfortunately, somewhat unfavorable market conditions prevent the steady operation of the mines, and any one conversant with coal mining knows that with slack work prevailing, it is always more or less difficult and expensive to keep the mines in order. Notwithstanding this drawback, the great majority of the Appanoose county mines have been maintained in fair condition during the last two years, and a considerable number of them have been materially improved.

## MINES IN APPANOOSE COUNTY, THEIR LOCATION, ETC.

Corporation, Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, if Any.	Kind of opening.	System of Working.	Power used.	Means of Ventilation.
Scandinavian Coal company.....	2	Plano.	K & W	Shaft.	Room and pillar.	Steam.	Fan.
Appanoose Coal and Fuel company.....	8	West of Brazil.	K & W	Slope.	Long wall.	Electricity.	Furnace.
Walnut Block Coal company.....		Brazil.	K & W	Drift.	Long wall.	Horse.	Furnace.
Phoenix Coal company.....		Brazil.	K & W	Drift.	Long wall.	Steam.	Furnace.
Centerville Block Coal company.....	6	Brazil.	K & W	Slope.	Long wall.	Steam.	Furnace.
Tipton Co-operative Coal company.....		Brazil.	K & W	Drift.	Long wall.	Horse.	Furnace.
Peacock Coal company.....		Brazil.	K & W	Drift.	Long wall.	Horse.	Furnace.
Oriental Coal company.....	1	South of Brazil.	K & W	Slope.	Long wall.	Steam.	Furnace.
Keystone Coal company.....	2	1 mile southeast of Brazil.	K & W	Slope.	Long wall.	Steam.	Furnace.
Centerville Block Coal company.....	8	West of Centerville.	K & W, and Iowa Cent'l	Shaft.	Long wall.	Steam.	Fan.
Anchor Coal company.....	1	Centerville.	K & W	Shaft.	Room and pillar.	Steam.	Fan.
Scandinavian Coal company.....	1	Centerville.	K & W	Shaft.	Room and pillar.	Steam.	Fan.
Dewey Coal company.....		1 1/2 miles southeast of Centerville.	K & W	Shaft.	Room and pillar.	Steam.	Fan.
Hooking Valley Coal company.....	4	2 miles southwest of Centerville.	C, B & K, C	Slope.	Long wall.	Horse.	Furnace.
Hooking Valley Coal company.....	2	1 1/2 miles southwest of Centerville.	C, B & K, C	Shaft.	Long wall.	Steam.	Fan.
Mendota Coal and Mining company.....		West of Centerville.	C, B & K, C	Shaft.	Long wall.	Steam.	Fan.
Thistle Coal company.....	3	Southeast of Centerville.	C, B & K, C	Shaft.	Long wall.	Steam.	Fan.
Thistle Coal company.....	3	1 1/2 miles east of Centerville.	C, B & K, C	Shaft.	Long wall.	Steam.	Fan.
Thistle Coal company.....	3	1 1/2 miles east of Centerville.	C, B & K, C	Shaft.	Long wall.	Steam.	Fan.
Exline Coal company.....	2	West of Exline.	C, B & K, C	Shaft.	Room and pillar.	Steam.	Fan.
Exline Coal company.....	2	West of Exline.	C, B & K, C	Shaft.	Room and pillar.	Steam.	Fan.
Royal Coal company.....		Exline.	C, B & K, C	Shaft.	Room and pillar.	Steam.	Fan.
Centerville Block Coal company.....	9	Northeast of Exline.	C, B & K, C	Shaft.	Room and pillar.	Steam.	Fan.
Centerville Block Coal company.....	9	West of Centerville.	Iowa Central	Shaft.	Room and pillar.	Steam.	Fan.
Centerville Block Coal company.....	9	Forbush.	Iowa Central	Shaft.	Long wall.	Steam.	Fan.
Centerville Block Coal company.....	9	Numa.	C, R I & P	Shaft.	Long wall.	Steam.	Fan.
Centerville Block Coal company.....	9	4 miles south of Centerville.	C, R I & P	Shaft.	Long wall.	Steam.	Fan.
Centerville Block Coal company.....	9	3 miles south of Centerville.	C, R I & P	Shaft.	Long wall.	Steam.	Fan.
Centerville Block Coal company.....	9	2 miles south of Centerville.	C, R I & P	Shaft.	Long wall.	Steam.	Fan.
Centerville Block Coal company.....	9	South of Centerville.	C, R I & P	Shaft.	Room and pillar.	Steam.	Fan.
Centerville Block Coal company.....	9	East of Centerville.	C, R I & P	Shaft.	Room and pillar.	Steam.	Fan.
Centerville Block Coal company.....	9	East of Centerville.	C, R I & P	Shaft.	Room and pillar.	Steam.	Fan.
Centerville Block Coal company.....	9	Jerome.	C, M & St. P.	Shaft.	Long wall.	Steam.	Fan.
Centerville Block Coal company.....	9	1 1/2 mile east of Jerome.	C, M & St. P.	Shaft.	Long wall.	Steam.	Fan.

F. H. Juckett Coal company.....	8 miles southwest of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Appanose Coal and Fuel company.....	Diamond.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Appanose Coal and Fuel company.....	Diamond.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Peerless Coal company.....	West of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Horse.	Furnace.
Peerless Coal company.....	West of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Furnace.
Egypt Coal company.....	West of Mystic.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Peerless Coal company.....	Mystic.....	O. M. & St. P.	Drift.	Long wall.....	Horse.	Furnace.
Artie Coal company.....	West of Mystic.....	O. M. & St. P.	Slope.	Long wall.....	Horse.	Furnace.
Acken Coal company.....	West of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Acken Coal company.....	West of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Horse.	Fan.
Peerless Coal company.....	West of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Jet.
Mystic Coal company.....	West of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
J. Helme Coal company.....	Mystic.....	O. M. & St. P.	Slope.	Long wall.....	Horse.	Furnace.
Diamond Block Coal company.....	Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Horse.	Fan.
Cedar Rapids Fuel company.....	Mystic.....	O. M. & St. P.	Drift.	Long wall.....	Horse.	Furnace.
Peerless Coal company.....	Mystic.....	O. M. & St. P.	Drift.	Long wall.....	Steam.	Furnace.
Peerless Coal company.....	Mystic.....	O. M. & St. P.	Drift.	Long wall.....	Horse.	Furnace.
Diamond Block Coal com. any.....	Mystic.....	O. M. & St. P.	Slope.	Long wall.....	Horse.	Furnace.
Beggs Coal company.....	1 1/2 mile east of Mystic.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Furnace.
Orr Bros. Coal company.....	Clarkdale.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Diamond Block Coal company.....	Clarkdale.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Star Coal company.....	Clarkdale.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Stone Coal company.....	Clarkdale.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Dunley Block Coal company.....	Clarkdale.....	O. M. & St. P.	Shaft.	Long wall.....	Steam.	Fan.
Manufacturers Coal & Coke company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Horse.	Furnace.
H. H. Parker.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Superior Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Dormetic Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
White Oak Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Red Oak Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
O. W. Tunnell.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
J. R. Pettigrew.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Ira A. Guinn.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Walnut Grove Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
J. R. Wright.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
J. Sears.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Wm. Smith.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
J. W. Shirey.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Happy Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
White Oak Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.
Monitor Coal company.....	Clarkdale.....	O. M. & St. P.	Slope.	Long wall.....	Steam.	Furnace.

## APPANOOSE COUNTY—CONTINUED.

Corporation, Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, If Any.	Kind of opening.	System of Working.	Power used.	Means of ventilation.
Star Coal company	.....	Centerville.....	.....	Shaft.	Room and pillar.	Horse	Furnace.
Erie Coal company	.....	North of Centerville ..	.....	Shaft.	Room and pillar.	Horse	Furnace.
Rock Valley Coal company	.....	Northeast of Centerville ..	.....	Shaft	Room and pillar.	Horse	Furnace.
John Gehrmann	.....	North of Centerville ..	.....	Shaft	Room and pillar.	Horse	Furnace.
John Koontz	.....	North of Centerville ..	.....	Shaft.	Room and pillar.	Horse	Furnace.
Edgim & Barrett	.....	East of Mystic	.....	Slope.	Long wall	Horse	Furnace.
Blitzinger & Company	.....	Mystic ..	.....	Slope.	Long wall	Horse	Furnace.
W. Milburn	.....	Mystic ..	.....	Slope.	Long wall	Horse	Furnace.

**MONROE COUNTY (Part).**

Two years ago, by the Governor's order, the part of Monroe county bounded on the west by the Wabash railway and on the south by the main line of the C., B. & Q., was taken out of the first inspection district and added to the second. In the part of Monroe county, left in this district, thirteen mines are operated. Eleven of these have direct railroad connections and two have not. The latter, however, ship a considerable portion of their output by rail. The coal carrying railroads are the C., B. & Q., the Iowa Central and the C., M. & St. P. The Wabash railway has so far no mines in this county contributory to it.

The working time of the mines on the whole was considerably less last year than in the preceding year, only three mines showing gains in this respect. The mine of the Excelsior Coal Co. made a gain of eighteen days last year over the preceding year, mine No. 6 of the Phillips Fuel Co. gained seventy-eight days and mine No. 10, operated by the Whitebreast Fuel Co., of Illinois, gained sixteen days. These three mines employed last February 352 miners as against 281 in February, 1904, and the increase in their coal output last year over the year ending June 30, 1904, amounted to 37,091 tons. On the other hand, there was a marked loss in working time last year in the remaining important mines in the county. Mine No. 3 of the Wapello Coal Co. lost fifty-seven days; mine No. 4 of the same company, sixty-four days; No. 4 mine of the Smoky Hollow Coal Co., 24 days; No. 6 mine of the same company, thirty-seven days; mine No. 1 of the Hocking Coal Co., forty days; and mine No. 2 of the same company, thirty-nine days. Considering this serious drawback, these mines show but a comparatively small reduction in their coal output last year. In the year ending June 30, 1904, these mines produced 889,890 tons of coal, with 1,017 miners employed in February, 1904; last year they produced 850,333 tons of coal with 1,148 miners working last February. The gain in production made by the mines on the Milwaukee railroad, together with the gain coming from mine No. 3 of the Hocking Coal Co. more than balanced the losses shown, and the net increase in last year's coal production of the part of Monroe county assigned to this district over the preceding year amounted to 10,809 tons.

Six corporations control the above eleven railroad mines. The Smoky Hollow Coal Co. operates mines 4, 6 and 7, located southeast of Avery. Mine No. 7, although opened for more than two years, has been worked but little, but as No. 4 mine will soon be exhausted, preparations are now being made to develop the new mine. It has a fine slope opening, is ventilated by a fan, sixteen feet in diameter, and its general condition is good. Mine No. 6 belonging to the above company, is one of the largest mines in the State, employing an underground force of about 400 men and boys. To keep a

mine of this size always in good condition, in all its parts, is a serious problem but it has been fairly satisfactorily solved by the management in the past, and there is reasonable assurance that the future needs of the mine will be well cared for. The ventilation was nearly always found in satisfactory condition and due consideration was given to provide reasonable safety for the men employed in the mine. A separate traveling road, of fair dimensions and in good condition, parallels the main haulage road.

The Wapello Coal company operates mines 3 and 4, located respectively west and northwest of Hiteman. No. 4 mine is in good condition, well cared for and fairly well ventilated. The system adopted in this mine, and used for the first time on an extensive scale in Iowa, of leaving the main cross entries solid and driving cross entries, from which the rooms are turned, connecting them, has given entire satisfaction. The adoption of this system has resulted in materially reducing the danger from squeezes. It has permitted the installation of an economical and efficient haulage system and it has proved of especial benefit to the ventilation of the mine. In mine No. 3 considerable work has been done to develop the south side of the mine and increase its output and at the same time efforts have been made to better its sanitary condition. The south air course is being enlarged, stoppings have been rebuilt and coated with cement, the mine stables have been moved to safer and better locations and other work has been done to improve the mine and benefit the men working in it. In both mines separate traveling roads, paralleling the haulage roads, have been provided and they are maintained in good condition.

The need of thorough and careful prospecting of supposed coal territory, before commencing its actual development, is again shown by the mistake made in opening the mine of the Excelsior Coal Co. in its present location. The mine has not proved a success, its total coal production has been small and in all probability it will soon be abandoned.

Mine No. 6 of the Phillips Fuel Co. has been made safer and its ventilation has been improved by the sinking of an additional air shaft. It was in this mine two shotfirers lost their lives on January 20, 1904. Another fatal accident occurred in it on March 23, 1905, when Thos. Davis, a miner, was killed by a fall of slate in his room. Considerable improvement will have to be made in the ventilating apparatus and airways to keep the ventilation of the mine in satisfactory condition.

Mine No. 10, operated by the Whitebreast Fuel Co., of Illinois, is well arranged for the rapid and economical handling of a large output of coal. The tower is steel, the hoisting is done by a pair of first motion engines and labor saving devices are used to advantage. The mine is ventilated by a force fan, fourteen feet in diameter, set in a steel casing. While its engine is of ample power, the fan itself shows weakness in construction, and, although partially successful efforts have been made to strengthen it, it can only be run safely at a rather low speed, and consequently its efficiency is kept at a correspondingly low point. In parts of the mine the roof is rather tender, but notwithstanding this, no fatal accidents occurred in it during the last two years. The mine has been in operation more than four years with an average force of 175 miners employed, and in all that time not a miner lost his life while at work in his place.

*Scale 1"=100'*

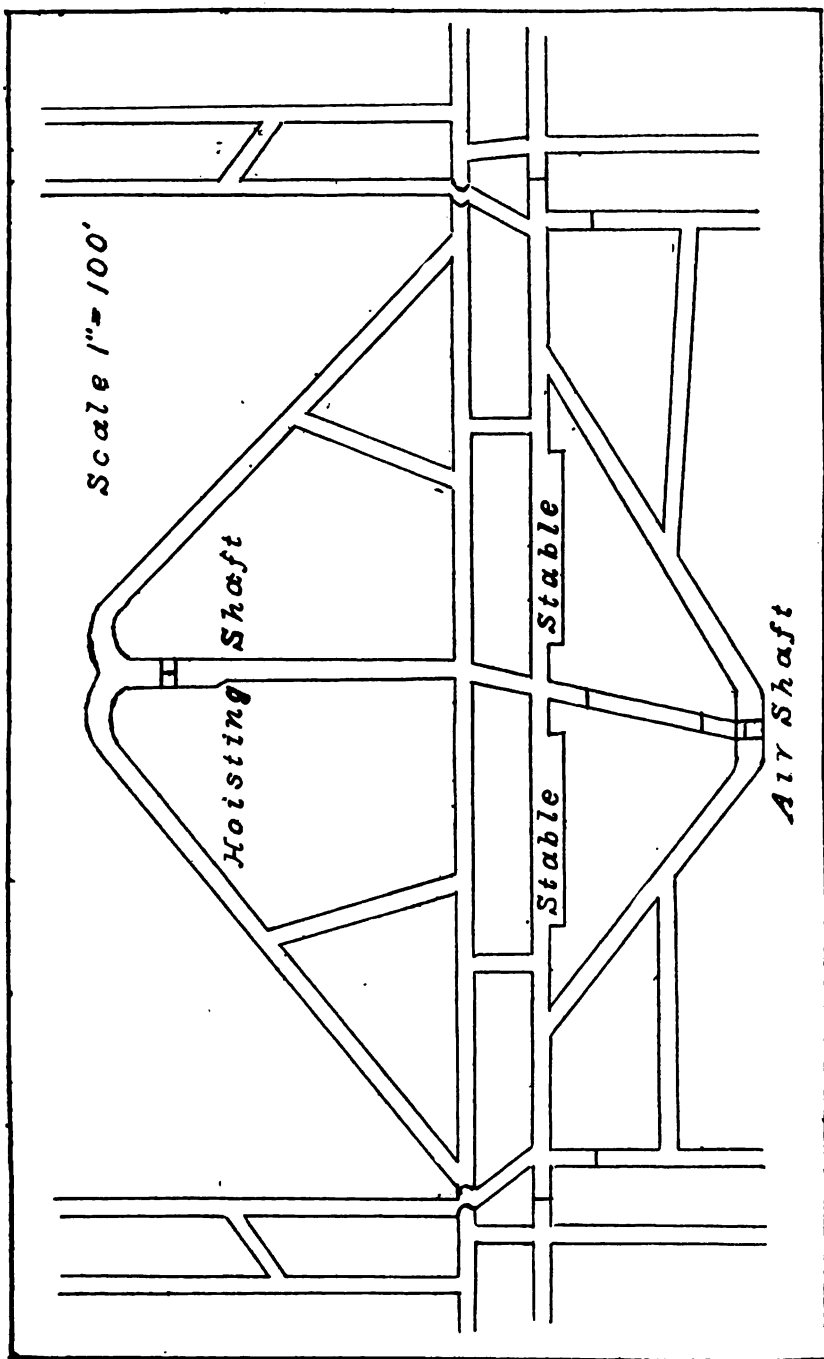
*Hoisting Shaft*

*Hoisting*

*Stable*

*Stable*

*Air Shaft*



The Hocking Coal Co. operates three mines, located a few miles south of Albion. Mine No. 1 will soon be abandoned. When the present Hocking Coal Co. bought this mine it was in bad condition and all efforts to improve it since have been but indifferently successful. I believe little regret will be felt over the closing of this mine. Mine No. 2 has been greatly improved during the last year and a half, and considering its extent and the number of men employed (350) is in very fair condition. The management intends to install mechanical haulage and when that is done the mine's future coal output should show a material increase. Mine No. 3 was opened this year and promises to become one of the largest coal producers in the State. The coal is of fair thickness and of good quality. A steel tower will be erected, self-dumping cages will be used, a first motion hoisting engine is already in place and the usual labor saving devices will be provided. The mine is ventilated by a force fan, fourteen feet in diameter, which is capable of delivering nearly 1,000 cubic feet of air per revolution. The shaft bottom (see sketch) has been well arranged to facilitate the rapid handling of coal and the underground arrangements for the future successful ventilation of the mine are good.

It is not probable that any new mines will be opened this year in the part of Monroe county belonging to this district, and as the mines in operation are in condition to greatly increase their output to meet any immediate future demand, there appears to be little need to add, for the present at least, to the number of mines now working.

## MINES IN MONROE COUNTY (PART), THEIR LOCATION, ETC.

Corporation, Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, if any.	Kind of opening.	System of Working.	Power used.	Means of ventilation.
Wapello Coal company .....	.....	1 mile west of Hiteman .....	C, B. & Q .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Wapello Coal company .....	4 .....	3 miles northwest of Hiteman .....	C, B. & Q .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Smoky Hollow Coal company .....	.....	Hynes .....	C, B. & Q .....	Slope .....	Room and pillar .....	Steam .....	Fan .....
Smoky Hollow Coal company .....	.....	4 miles southeast of Hynes .....	C, B. & Q .....	Slope .....	Room and pillar .....	Steam .....	Fan .....
Smoky Hollow Coal company .....	.....	4 miles southeast of Hynes .....	C, B. & Q .....	Slope .....	Room and pillar .....	Steam .....	Fan .....
Frederick Coal company .....	.....	1 1/2 miles west of Foster .....	C, M. & St. P. .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Phillips Coal company .....	.....	1 1/2 miles west of Foster .....	C, M. & St. P. .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Whitbreast Coal company .....	6 .....	West of Foster .....	C, M. & St. P. .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Whitbreast Coal company .....	10 .....	Hiteman .....	C, M. & St. P. .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Hooking Coal company .....	.....	Hooking .....	Iowa Central .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Hooking Coal company .....	.....	Hooking .....	Iowa Central .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Hooking Coal company .....	.....	Hooking .....	Iowa Central .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Star Coal company .....	.....	2 1/2 miles south of Albia .....	Iowa Central .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
Star Coal company .....	.....	Northwest of Albia .....	Iowa Central .....	Shaft .....	Room and pillar .....	Steam .....	Fan .....
White Ash Coal company .....	.....	South of Avery .....	.....	Slope .....	Room and pillar .....	Steam .....	Fan .....

### LUCAS COUNTY.

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The coal production of Lucas county for the year ending June 30, 1903 amounted to 269,539 tons, for the year ending June 30, 1904, it was 239,384 tons, during last year 165,256 tons were produced and conditions, as they exist at present, seem to warrant the prediction that, in all probability, the year just entered upon will show no increase and may even show a further decline in the coal output. This is undoubtedly an unfavorable showing, but it should not be taken as an indication that the coal mining industry of the county is in a bad way and that another collapse of the mining business, like that which occurred fourteen years ago, need be feared. The outlook for the future growth of the county's coal industry was never better than at this time, and it is certain that this temporary present decline will be amply compensated for in the near future.

The shrinkage in tonnage last year was largely due to the slack work prevailing and the closing down of the Big Hill mine last April.

The principal mine in the county is located at Cleveland and is operated by the Whitebreast Fuel company of Illinois. The mine is provided with good machinery of ample power to take care of a large coal output, has a steel tippie and its safety devices and other equipments are in good order. The shaft is 321 feet deep. Motor haulage is used with satisfactory results. The mine is ventilated by a force fan twenty feet in diameter, set in a steel casing. The fan furnishes a fair air volume, but as the mine is large great care is necessary to keep the ventilation of all its parts in satisfactory condition. The difficulty is made greater by the existence of an extensive fault, running in a southwesterly direction and dividing the mine in two parts. The north side is now fairly well ventilated and the south will be improved in this respect. Work is now going on to clean and enlarge the south air course with the view of not only benefiting the ventilation but to also provide an available and safe traveling way, apart from the main haulage road, for the men working in the south part of the mine.

As stated above the Big Hill mine at Lucas was closed down last April. The cars, rails, pumps, etc., were removed from the mine, and it appeared that its abandonment was complete. Recently, however, arrangements were made to reopen the mine, and the indications are that it will be in operation again soon.

The Inland Fuel Company's mine, located north of Chariton, is in good condition.

In the above three mines the lower seam of coal is worked. Its average thickness is about five feet. The veins worked in the few small local mines in the county belong to the upper coal measures and their thickness seldom exceeds two feet.

The number of fatal accidents was less during the last two years than during the preceding two years. In the biennial period ending June 30, 1903, five fatal accidents occurred in the mines of the county, while but two occurred in the biennial period just closed.

## MINES IN LUCAS COUNTY, THEIR LOCATION, ETC.

Corporation, Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, If Any.	Kind of opening.	System of Working.	Power used.	Means of ventilation.
Whitebreast Fuel company.....	4	Cleveland.....	C., B. & Q.....	Shaft.	Room and pillar.	Steam....	Fan.
Big Hill Fuel company.....		Lucas.....	C., B. & Q.....	Shaft.	Room and pillar.	Steam....	Fan.
Inland Fuel company.....		8½ miles northeast of Chardon.	C., B. & Q.....	Shaft.	Room and pillar.	Steam....	Fan.
Skidmore Bros.....		Northeast of Lucas	.....	Shaft.	Long wall.....	Horse....	Furnace.

### WAYNE COUNTY.

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The coal output of Wayne county is at present produced by ten mines two of them having shipping facilities and eight doing a local business. The two shipping mines are located at Seymour, five of the local mines are located south of Confidence, two about five miles west and southwest of Seymour and one near Harvard. The Big Jim mine, connected with the C., M. & St. P. Railroad and operated by the Numa Block Coal Co. produced more coal during the last two years than any other mine in the Appanoose-Wayne field. At this mine the coal was reached at a depth of 202 feet. The hoisting is done by first motion engines and self-dumping cages and a box car loader facilitates the handling of the mine's output. A fan sixteen feet in diameter ventilates the workings satisfactorily. The Sunshine mine, connected with the Rock Island Railroad, was purchased about three years ago from the Seymour Coal Co. by the Numa Block Coal Co. At the time the purchase was made and for some time afterwards the mine was in bad condition, but the shafts have since been enlarged and timbered throughout, new cages have been provided, the underground workings have been improved and the mine's coal output has been materially increased. The ventilation of the mine is better than formerly and there is reasonable assurance that [further improvement in that direction [will be made.

Of the local mines the Frye mine south of Confidence and the Walker mine, five miles southwest of Seymour, are the best equipped. At both mines steam power is used, the mine buildings are of a substantial character and the safety devices, required by law, are in good condition.

The mines in the country are worked long-wall and the mine workings are fairly safe. While there were two fatal accidents during the last two years, none occurred at the face. John McCue was killed in mine No. 3 of the Numa Block Coal company on February 20, 1904, while crossing the shaft, and Ed Green lost his life on January 6, 1905, in the tippie of the Big Jim mine by being crushed between the slack car and a heavy timber.

The yearly coal output of the county was greater last year than ever before and for the first time exceeded 100,000 tons.

## MINES IN WAYNE COUNTY, THEIR LOCATION, ETC.

Corporation, Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, If Any.	Kind of opening.	System of Working.	Power used.	Means of ventilation.
Numa Block Coal company.	2	1 mile east of Seymour	C, M & St. P.	Shaft.	Long wall.	Steam	Fan.
Numa Block Coal company.	8	Seymour	C, R. I. & P.	Shaft.	Long wall.	Steam	Fan.
J. L. Black		North of Sewal		Shaft.	Long wall.	Horse	Furnace.
E. McCracken		6 miles west of Seymour		Shaft.	Long wall.	Steam	Furnace.
Sam Walker		4 miles southwest of Seymour		Shaft.	Long wall.	Steam	Furnace.
E. A. Sipes		4 miles south of Confidence		Shaft.	Long wall.	Steam	Furnace.
A. H. Hayhurst		3½ miles south of Confidence		Shaft.	Long wall.	Horse	Furnace.
John Hayhurst		South of Confidence		Shaft.	Long wall.	Horse	Furnace.
L. Frye		South of Confidence		Shaft.	Long wall.	Steam	Fan.

### TAYLOR COUNTY.

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The principal mines in Taylor county are located near New Market and three of these have switches off the Burlington road. In the northwestern part of the county three or four small mines are operated during the fall and winter, but their coal output is limited. The coal vein is about sixteen inches thick, is reached by shafts and worked long-wall. The underground conditions are conducive to safe mining and accidents in the mines are rare, none of a serious nature having occurred in the last two years. Hoisting is done by horse power entirely and the apparatus used is now in fairly satisfactory condition. Ventilation is produced by small furnaces and not difficult to maintain.

The returns show that the coal output of the county has not been as great last year and the year before as in former years. Various causes have contributed to this end, but the principal one, I believe, was the opening of the mines near Clarinda.

## MINES IN TAYLOR COUNTY, THEIR LOCATION, ETC.

Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, if Any.	Kind of opening.	System of Working.	Power used.	Means of ventila-
Tomlinson & Pace. Campbell Coal Co. Campbell Coal Co. Wm. Browning. N. Easter. H. Ankeny. L. Ankeny. P. Halter. W. E. Rogers	1 2	East of New Market. East of New Market. East of New Market. 2 miles east of New Market. 6 miles north of New Market. 6 miles north of New Market. 6 miles north of New Market. Hemshaw	C., B. & Q. C., B. & Q. C., B. & Q.	Shaft. Shaft. Shaft. Shaft. Shaft. Shaft. Shaft. Shaft.	Long wall. Long wall. Long wall. Long wall. Long wall. Long wall. Long wall. Long wall.	Horse. Horse. Horse. Horse. Horse. Horse. Horse. Horse.	Furnace. Furnace. Furnace. Furnace. Furnace. Furnace. Furnace. Furnace.

### PAGE COUNTY.

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The four mines in this county, located west and southwest of Clarinda and within a few miles of that town, produced during the last two years a little more than thirty-four thousand tons of coal. They have no railroad facilities and have done no shipping of coal by rail, but they have a good home market, and in the winter time the demand often exceeds the supply.

The vein worked averages less than eighteen inches in thickness and is of fair quality. Shafts of considerable depth are necessary to reach the coal, and this, together with the thinness of the coal, makes mining rather expensive.

The equipment of the mines compares favorably with the equipments of mines of like character elsewhere. The safety devices in use conform to the requirements of the law. Second openings have been made at all the mines and they are kept in available condition. The hoisting apparatus is kept in fair order. Ventilation is produced by small furnaces and is nearly always satisfactory.

Favorable natural conditions tend to make the work of the miner comparatively safe, yet two fatal accidents occurred in this county about a year and a half ago. One in a small mine located about five miles south of Clarinda, the other in the Johnston mine west of the county seat. No serious accident has occurred in any of the mines in Page county in the last year and a half.

## MINES IN PAGE COUNTY, THEIR LOCATION, ETC

Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, if Any.	Kind of opening.	System of Working.	Means of Ventilation.	Power used.
Johnston & Co.....	..	2 miles west of Clarinda .....	.....	Shaft .....	Long wall .....	Horse .....	Furnace.
Van Aradol & Woods .....	..	West of Clarinda.....	.....	Shaft .....	Long wall .....	Horse .....	Furnace.
J. W. Berry Coal company. . .	1	3 miles southwest of Clarinda.....	.....	Shaft .....	Long wall .....	Horse .....	Furnace.
J. S. Moore.....	...	2½ miles southwest of Clarinda.....	.....	Shaft .....	Long wall .....	Horse .....	Furnace.

### ADAMS COUNTY.

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On account of the smallness of the coal seam and the fact that no mines have been developed near the railroad, no coal is shipped from the county by rail, and as there are but few factories and no large coal consuming concerns in the county, the market is limited to the demands for home use and consequently the yearly coal production has never been large. In the aggregate, however, since the time mining first commenced in the county, until now, Adams county has made a fair record. While absolutely correct data are not available, I believe it can be safely assumed that its coal production during the last thirty years has amounted to about 300,000 tons.

The coal seam averages about sixteen inches in thickness, fairly free from impurities. It is reached by shallow shafts and worked long-wall. While the equipment of the mines is generally of a rather crude character, the safety of the miners is not neglected. Mining so far has been carried on only in the western half of the county, along the Nodaway river and its branches and the principal mining centers are near Carbon, Eureka, Briscoe and Hoyt.

No extensive systematic efforts have been made to discover the existence of available seams of coal below the one now worked and it is problematical if any can be found. At Carbon a hole was put down to the depth of more than 400 feet. The work was done with a core drill. The strata drilled through consisted principally of lime shale, limestone and sandstone, and no other indications whatever of coal were found.

As most of the work in the mines of this county is done during the colder months of the year, and as the mine workings are never extensive and the number of men working in each mine small, little difficulty is experienced in keeping the mine ventilation in satisfactory condition.

Owing to favorable natural conditions and the method of working the coal, accidents to miners of a serious nature are very rare, and none has occurred during the last two years.

## MINES IN ADAMS COUNTY, THEIR LOCATION, ETC.

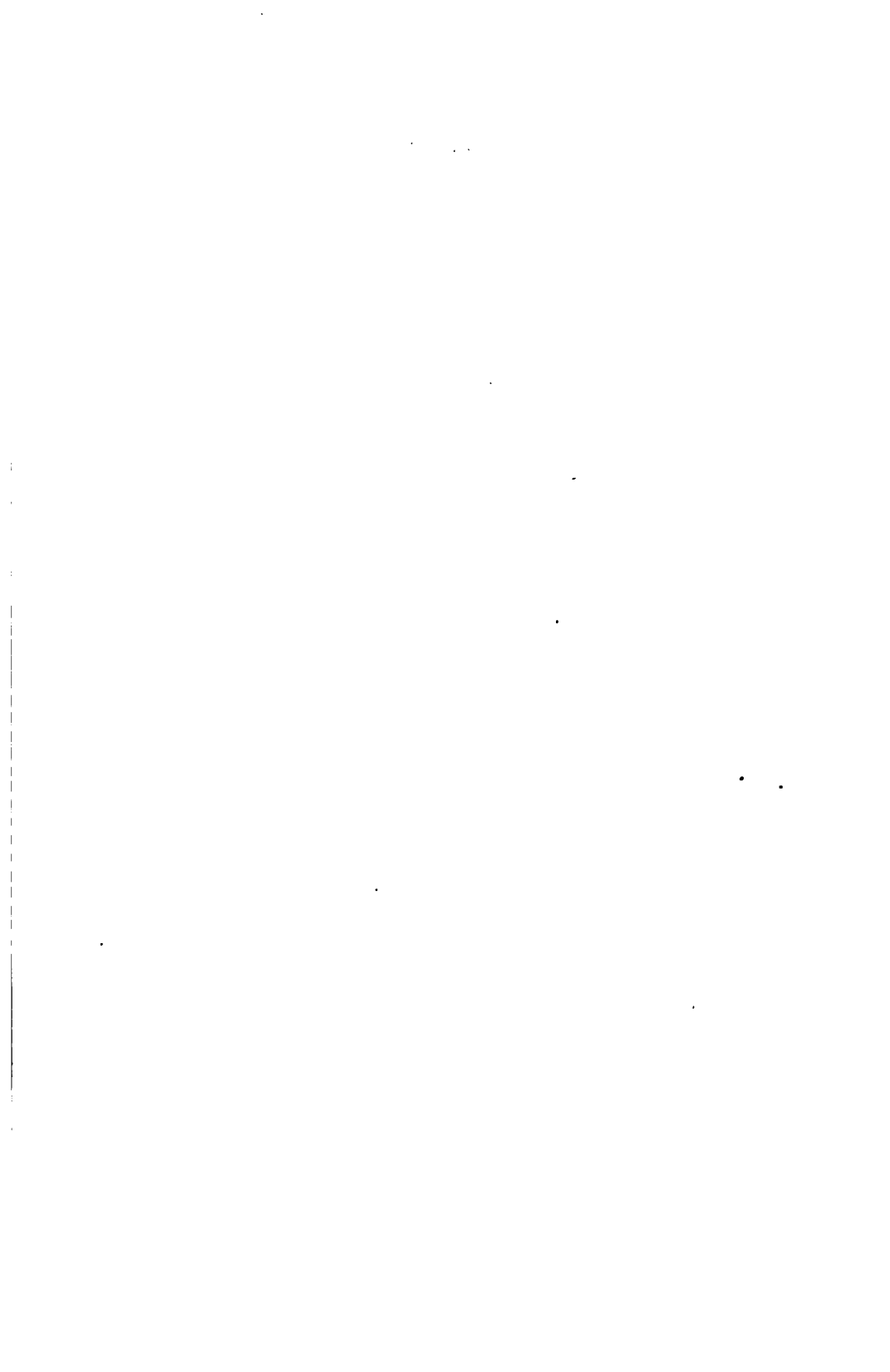
Firm or Operator.	Mine number.	Location of Mine.	Railroad Connection, if Any.	Kind of open- ing.	System of Working.	Power used.	Means of vent- ilation.
Chas. Orist.....	.....	Eureka.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
J. M. Harralson.....	.....	Eureka.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
J. M. Benson.....	.....	Eureka.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
Ed. Andor.....	.....	North of Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
M. Jones.....	.....	Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
J. F. Bush.....	.....	Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
J. F. Wild.....	.....	Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
Collins & Barker.....	.....	Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
H. Hoveck.....	.....	Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
Herm. Day.....	.....	West of Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
Jan. Gemmell.....	.....	West of Carbon.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
Eclipse Coal company.....	.....	Brisco.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
O. L. Haslen.....	.....	Brisco.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.
Mason & Dougherty.....	.....	Northwest of Nodaway.....	.....	Shaft.....	Long wall.....	Horse.....	Furnace.

List of corporations, firms and individuals operating mines in the first district, their postoffice address, number of mines operated by them in the district and shipping facilities, if any.

Corporation, Firm or Individual.	Address.	No. of mine.	Shipping Facilities.
Scandinavian Coal company .....	Centerville .....	2	Keokuk & Western.
Appanoose Coal and Fuel company..	Diamond .....	3	Keokuk & Western and Chicago, Milwaukee & St. Paul
Walnut Block Coal company .....	Centerville .....	1	Keokuk & Western.
Phoenix Coal company .....	Brazil .....	1	Keokuk & Western.
Centerville Block Coal company .....	Centerville .....	6	Keokuk & Western, Chicago, Rock Island & Pacific and Iowa Central
Tipton Co-operative Coal Co. ....	Brazil .....	1	Keokuk & Western.
Peacock Coal company .....	Brazil .....	1	Keokuk & Western.
Oriental Coal company .....	Centerville .....	2	Keokuk & Western.
Keystone Coal company .....	Centerville .....	1	Keokuk & Western.
Anchor Coal company .....	Centerville .....	3	Keokuk & Western and Chicago, Rock Island & Pacific.
Dewey Coal company .....	Centerville .....	1	Keokuk & Western.
Hocking Valley Coal company .....	Cincinnati .....	2	Chicago, Burlington & Kansas City.
Mendota Coal and Mining company.	Cincinnati .....	2	Chicago, Burlington & Kansas City.
Thistle Coal company .....	Cincinnati .....	3	Chicago, Burlington & Kansas City.
Exline Coal company .....	Exline .....	2	Chicago, Burlington & Kansas City.
Iowa Block Coal company .....	Centerville .....	1	Chicago, Burlington & Kansas City.
Illinois and Iowa Fuel company .....	Ottumwa .....	1	Iowa Central.
Numa Block Coal company .....	Seymour .....	3	Chicago, Rock Island & Pacific and Chicago, Milwaukee & St. Paul.
Prairie Block Coal company .....	Centerville .....	1	Chicago, Rock Island & Pacific.
Center Coal company .....	Centerville .....	1	Chicago, Rock Island & Pacific.
Consumers Coal company .....	Cedar Rapids .....	1	Chicago, Milwaukee & St. Paul.
Big Jo Coal company .....	Harkes .....	1	Chicago, Milwaukee & St. Paul.
F. H. Juckett Coal company .....	Cedar Rapids .....	1	Chicago, Milwaukee & St. Paul.
Peerless Coal company .....	Centerville .....	6	Chicago, Milwaukee & St. Paul.
Egypt Coal company .....	Mystic .....	1	Chicago, Milwaukee & St. Paul.
Artic Coal company .....	Mystic .....	1	Chicago, Milwaukee & St. Paul.
Acken Coal company .....	Mystic .....	2	Chicago, Milwaukee & St. Paul.
Mystic Coal company .....	Mystic .....	1	Chicago, Milwaukee & St. Paul.
J. Helme Coal company .....	Mystic .....	1	Chicago, Milwaukee & St. Paul.
Diamond Block Coal company .....	Mystic .....	3	Chicago, Milwaukee & St. Paul.
Cedar Rapids Fuel Co. ....	Cedar Rapids .....	1	Chicago, Milwaukee & St. Paul.
Beggs Coal company .....	Mystic .....	1	Chicago, Milwaukee & St. Paul.
Orr Bros. Coal company .....	Mystic .....	1	Chicago, Milwaukee & St. Paul.
Star Coal company .....	Rathbun .....	1	Chicago, Milwaukee & St. Paul.
Unity Block Coal company .....	Darbyville .....	1	Chicago, Milwaukee & St. Paul.
Manufacturers Coal & Coke company	Centerville .....	1	Keokuk & Western and Chicago Rock Island & Pacific.
Domestic Coal company .....	Cincinnati .....	1	
White Oak Coal company .....	Exline .....	1	
Red Oak Coal company .....	Exline .....	1	
O. W. Tunnell .....	Exline .....	1	
J. R. Pettigrew .....	Seymour .....	1	
Ira A. Guinn .....	Coal City .....	1	
Walnut Grove Coal company .....	Numa .....	1	Chicago, Rock Island & Pacific.
J. R. Wright .....	Centerville .....	1	
J. Sears .....	Centerville .....	1	
Wm. Smith .....	Centerville .....	1	
J. W. Shirey .....	Centerville .....	1	

## LIST OF CORPORATIONS, ETC.—CONTINUED.

Corporation, Firm or Individual.	Address.	No. of Mines.	Shipping Facilities.
Happy Coal company.....	Centerville.....	1	
White Oak Coal company.....	Centerville.....	1	
Monitor Coal company.....	Centerville.....	1	
Star Coal company.....	Centerville.....	1	
Trio Coal company.....	Centerville.....	1	
Rock Valley Coal company.....	Centerville.....	1	
John Schrum.....	Centerville.....	1	
John Koontz.....	Centerville.....	1	
Elgin & Barrett.....	Mystic.....	1	
E. Bittinger & Co.....	Mystic.....	1	
Wm. Milburn.....	Mystic.....	1	
Wapello Coal company.....	Hiteaman.....	2	Chicago, Burlington & Quincy.
Smoky Hollow Coal company.....	Avery.....	8	Chicago, Burlington & Quincy.
Star Coal company.....	Albia.....	1	Chicago, Burlington & Quincy.
White Ash Coal company.....	Avery.....	1	Chicago, Burlington & Quincy.
Excelsior Coal company.....	Foster.....	1	Chicago, Milwaukee & St. Paul.
Phillips Fuel company.....	Ottumwa.....	1	Chicago, Milwaukee & St. Paul.
Hocking Coal company.....	Hocking.....	3	Iowa Central.
Whitebreast Fuel Co. of Illinois.....	Ottumwa.....	2	Chicago, Milwaukee & St. Paul and Chicago, Burlington & Quincy.
Inland Fuel company.....	Chariton.....	1	
J. L. Slack.....	Sewal.....	1	
Sam Walker.....	Seymour.....	1	
E. A. Sipes.....	Promise City.....	1	
A. H. Hayhurst.....	Promise City.....	1	
L. Frye.....	Promise City.....	1	
John Hayhurst.....	Promise City.....	1	
Tomlinson & Pace.....	Newmarket.....	1	Chicago, Burlington & Quincy.
Campbell Coal company.....	Newmarket.....	2	Chicago, Burlington & Quincy.
Wm. Browning.....	Newmarket.....	1	Chicago, Burlington & Quincy.
N. Easter.....	Newmarket.....	1	
H. Ankeny.....	Newmarket.....	1	
I. Ankeny.....	Newmarket.....	1	
F. Heller.....	Newmarket.....	1	
W. E. Rogers.....	Villisca.....	1	
Johnston & Company.....	Clarinda.....	1	
Van Arsdol & Woods.....	Clarinda.....	1	
J. W. Berry Coal company.....	Clarinda.....	1	
J. S. Moore.....	Clarinda.....	1	
Chas. Christ.....	Corning.....	1	
J. M. Henton.....	Corning.....	1	
Ed. Amdor.....	Carbon.....	1	
M. Jones.....	Carbon.....	1	
J. F. Ruth.....	Carbon.....	1	
J. E. Wild.....	Carbon.....	1	
Ollins & Barker.....	Carbon.....	1	
H. Houck.....	Carbon.....	1	
H. Day.....	Nodaway.....	1	
Jas. Gammell.....	Nodaway.....	1	
Mason & Daugherty.....	Nodaway.....	1	
Eclipse Coal company.....	Briscoe.....	1	
C. L. Harlan.....	Cumberland.....	1	



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## **SECOND DISTRICT.**

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LETTER OF TRANSMITTAL.

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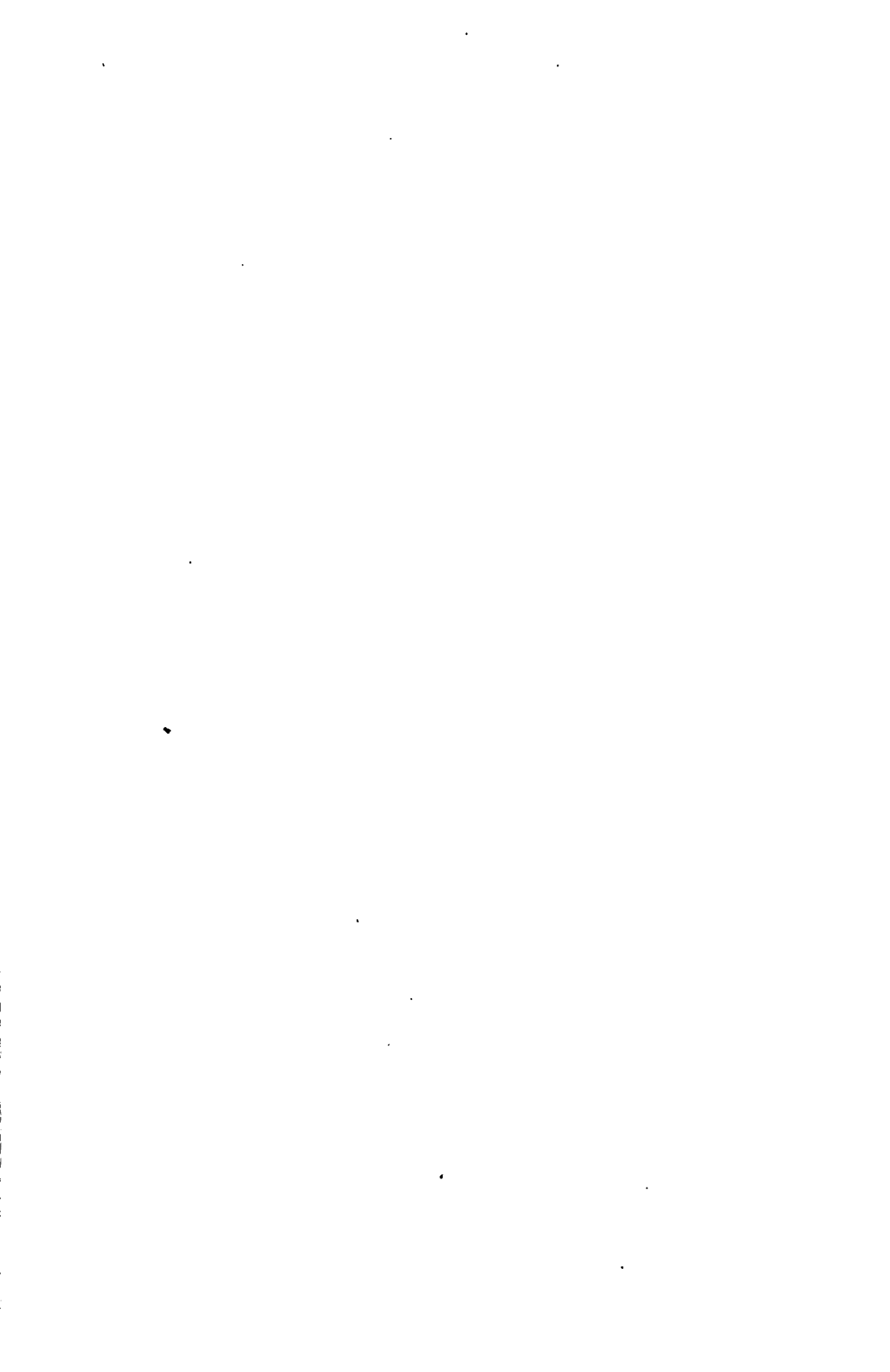
HON. ALBERT B. CUMMINS, Governor of Iowa.

*Sir*,—I have the honor to submit herewith, my first report as Mine Inspector of the Second District covering the biennial period ending June 30, 1905.

Very respectfully,

JAMES A. CAMPBELL,

*Inspector Second District.*



**REPORT OF SECOND DISTRICT.**

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During the thirteen months of my service in the Second District, I have visited 173 mines, and, with but few exceptions, I found the safety and sanitary conditions of the mines to be reasonably satisfactory, and in mines where it was necessary to make changes to better the condition of the mine I found the owner ready and willing to comply with the orders of the inspector, and to use all efforts to comply with the mining laws.

There has been a large amount of prospecting and development work done in this district the last year, and it is evident from the number of new mines under construction, and more to follow, that there will be a natural increase in the coal tonnage from this district in the future.

There have been a number of mines abandoned in the past two years, however the number of new mines opened will more than offset the ones abandoned, particularly so in tonnage, as several of the mines that have gone out of business depended entirely upon the local trade, and the majority of the new mines that are under construction will do a shipping business and have a large tonnage.

It gives the inspector pleasure to note the care that is constantly exercised by the miners and mine owners to prevent accidents in the mines.

There have been fifty-five scales inspected and tested and out of the above number twenty-seven were found to be weighing incorrectly and were condemned. In all cases the mine owner showed a disposition to adjust the scales and put them into a position to weigh correctly.

**FATAL ACCIDENTS IN SECOND DISTRICT FOR THE TWO  
YEARS ENDING JUNE 30, 1905.**

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**CARL J. PETERSON.**

A miner employed at mine No. 10 of the Consolidation Coal Company, Monroe county, was fatally injured on August 15, 1903, by a fall of slate. One wrist and one leg was broken and he received internal injuries from which he died two hours later.

**CHARLES WINCHELL.**

A driver in the employ of the Black Diamond Coal Company was instantly killed on September 30, 1903. He was blasting coal when slate fell crushing him and killing him instantly.

**DAVID HOPKINS.**

A shotfirer in the employ of the Consolidation Coal Company of Monroe county, was killed on December 22, 1903, while performing his duties as shotfirer. He had lighted shot when shot came through pillar tearing him all to pieces.

**EMMET GRIGGS.**

Top hand and chunker for the What Cheer Fuel Company at mine No. 1, Keokuk county, was killed on December 28, 1903, while working for the above company. He was trying to stop a coal rack partially loaded with coal when he was knocked down and car ran onto him. One leg was mangled below the knee; flange of wheel cut into groin and injured him internally. He died same day of accident.

**GEORGE W. COURTNEY.**

Miner, employed by the Waddell Coal Company of Wapello county, was killed by a fall of slate in above mine on October 27, 1903. He died about twenty minutes after accident occurred.

**BIRD PARKER.**

A miner, employed in mine No. 11, of the Consolidated Coal Company of Monroe county, was killed on July 1, 1904, by a fall of slate. He was at work in his room at the time. His neck was broken and head mashed and from appearances he must have been instantly killed.

**W. A. SMITH.**

A nightman, employed in mine No. 10, of the Consolidation Coal Company of Buxton, was fatally injured by a fall of slate on June 14, 1904. His skull was fractured in two places and death resulted from his injuries two hours after the accident.

## WILBUR J. ELY.

A blacksmith, employed by the Spring Creek Coal Company of Mahaska county, was killed on April 20, 1904, by falling from the top of a tower. timbers caught his glove and caused him to fall.

## LEVI WOODI.

A cager, employed by the Dunreath Coal Company, was instantly killed at the above mine on July 15, 1904, by being caught in the cage and carried to the ground landing and dropped back into the shaft. He had signaled to hoist and then afterwards tried to put car on cage and was caught by the cage and was carried to the top of shaft as stated above.

## DAVID JACKSON.

David Jackson, a miner employed by the Consolidation Coal Company in mine No. 10 was killed in said mine on the morning of August 20, 1904. He was waiting for shot to go off, and when shot went off it jarred down some slate which fell on him, injuring him so that he died within an hour.

## JOHN KOELMAN.

John Koelman, a driver employed in the mine of the Bolton & Hoover Coal Company of Mahaska county, was killed on July 13, 1904, by being run over by a loaded car in the mine. He had failed to sprag car, and in hooking up mule got in front of car and it ran over him.

## CHARLES BLANQUERT.

Charles Blanquert, a shotfirer in the employ of the Crescent Coal Company of Mahaska county, was killed on the afternoon of January 11, 1905, while engaged in the performance of his duties as shotfirer. Mr. Blanquert was killed by the shot making a break through into the place where he was when the shot went off. He was killed instantly.

## OSCAR NELSON.

April 30, 1905, Oscar Nelson was killed by a fall of slate while engaged in mining coal in the mine at Coalfield. The accident resulting in his death was caused by a fall of slate. Mr. Nelson was working alone at the time, and no one saw the slate fall. He was one of the oldest miners in Coalfield. He lived for about twenty-four hours after the accident.

## PORTER GLENN.

Porter Glenn, a miner in the employ of the Mammoth Vein Coal Company of Marion county, was killed on May 19, 1905, by a fall of roof in his room while engaged in his work in one of the mines of the above company.

## Total Accidents in District No. 2 for Two Years Ending June 30, 1905.

Date.	Name of Deceased	Occupation.	Cause of Death.	Employed by—	County.
August 15, 1903	Carl J. Peterson.	Miner	Fall of slate	Consolidation Coal company	Monroe.
September 30, 1903	Charles Winchell.	Driver	Fall of slate	Black Diamond Coal company	Mahaaka.
October 22, 1903	David Hopkins.	Shotfirer	Flying coal	Consolidation Coal company	Monroe.
December 28, 1903	Ermet Griggs.	Top hand.	Run over by car	What Cheer Fuel company.	Keokuk.
October 27, 1903	Geo. W. Courtney	Miner	Fall of slate	Waddell Coal company	Mahaaka.
April 20, 1904	Wilbur J. Ely.	Blacksmith	Falling from top of tower.	Spring Creek Coal company	Mahaaka.
June 1, 1904	Bird Parker	Miner	Fall of slate	Consolidation Coal company	Monroe.
June 14, 1904	W. A. Smith	Nightman	Fall of slate	Consolidation Coal company	Monroe.
July 16, 1904	Levi Wondt	Cager	Caught by cage	Dunreath Coal company	Marion.
August 20, 1904	David Jackson.	Miner	Fall of slate	Consolidation Coal company	Monroe.
July 18, 1904	John Koelman.	Driver	Run over by car	Bolton & Hoover Coal Co.	Mahaaka.
January 11, 1905	Charles Blanquert.	Shotfirer	Flying coal	Crescent Coal company	Mahaaka.
April 30, 1905	Oscar Nelson	Miner	Fall of slate	Coalfield Mine.	Monroe.
May 19, 1905	Porter Glenn	Miner	Fall of slate	Mammoth View Coal Co.	Marion.

**LIST OF NON-FATAL ACCIDENTS IN THE SECOND DISTRICT  
FOR THE TWO YEARS ENDING JUNE 30, 1904.**

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July 18, 1903, Robert Roberts, bellman, two bones in arm broken in Consolidation Coal Company's mine in Monroe county.

July 22, 1903, T. Balzer, refuse mover, Crescent Coal Company, Mahaska county, hand bruised by fall of slate; was necessary to amputate hand.

August 7, 1903, E. T. Ferrand, miner, Illinois & Iowa Fuel Company, Wapello county, leg broken by fall of slate.

August 28, 1903, George Lee, cager, at mine No. 10, Consolidation Coal Company, Monroe county, engineer lost control of engine and cage dropped to bottom of shaft. Thigh was fractured.

August 28, 1903, John Nichols, miner, Consolidation Coal Company, Monroe county, cage dropped to bottom of shaft. Knee dislocated.

August 28, 1903, Elias Swanson, miner, Consolidation Coal Company, Monroe county, cage dropped to bottom of shaft. Both ankles injured and injured internally.

August 28, 1903, Alex Beard, miner, Consolidation Coal Company, Monroe county, engineer lost control of engine and cage dropped to bottom of shaft. Fractured ankle and breast injured.

September 10, 1903, J. C. Slaughter, carpenter, Illinois & Iowa Fuel Company, Wapello county. Fell off scaffold; arm broken.

July 24, 1903, Walter Johnson, coupler, Consolidation Coal Company, Monroe county. Hand mashed and one bone of leg broken.

September 22, 1903, J. Spears, miner, hand crushed by fall of slate, Consolidation Coal Company, Monroe county.

September 23, 1903, C. M. Jones, miner, bruised through bowels by fall of slate in mine of Consolidation Company, Monroe county.

October 9, 1903, Simon Harris, miner, Consolidation Coal Company, Monroe county. Fracture of spine caused by fall of slate.

October 30, 1903, C. J. Johnson, miner, Illinois & Iowa Fuel Company, Wapello county. Crushed by fall of slate.

October 23, 1903, Sampson Hyde, coupler, What Cheer Fuel Company, Keokuk county. Crushed arm by being caught between top of cage and cross arm.

November 26, 1903, W. H. Millhouse, miner, Brown Bros. Mine, Wapello county. Leg broken by fall of slate.

November 25, 1903, Elijah Miller, cager, Consolidation Coal Company, Monroe county. Slipped under cage, right foot mashed and bones broken in foot.

December 5, 1903, W. W. Carey, boss driver, Consolidation Coal Company, Monroe county, was riding on air locomotive and was caught by trap door. Two ribs broken.

December 11, 1903, Richard Graves, night driver, Consolidation Coal Company, Monroe county. Car ran over his foot, mashing bones in heel.

December 14, 1903, A. Meyers, timberman, Consolidation Coal Company, Monroe county. Ankle dislocated and fracture of one leg bone at ankle. Fall of slate.

January 4, 1904, James Dalziel, miner, What Cheer Fuel Company, Keokuk county. Caught under cage. Head bruised and back injured.

January 5, 1904, James Speoe, miner, Illinois and Iowa Fuel Company, Wapello county. Crushed by fall of slate.

January 18, 1904, John Black, gasoline engineer, Consolidation Coal Company, Monroe county. Hand caught in cog wheel. Mashed thumb and first finger off; also bones in wrist so that hand had to be taken off.

January 19, 1904, James Cheves, miner, leg broken by fall of slate in mine of Consolidation Coal Company, Monroe county.

February 12, 1904, R. J. Barber, driver, Consolidation Coal Company, Monroe county. Caught between loaded car and roof. Arm broken.

February 16, 1904, Robert Vaughner, timberman, Consolidation Coal Company, Monroe county. Both legs broken below knees by fall of slate.

March 3, 1904, Joe Melcher, miner, Oskaloosa Coal Mining Company, Mahaska county. Back badly bruised and hip dislocated by fall of slate.

March 4, 1904, Thomas Legon, night driver, Consolidation Coal Company, Monroe county. Was on top of car of timbers when head hit roof. Fracture of skull.

March 6, 1904, S. A. Gantz an electrician, Consolidation Coal Company, Monroe county. Leg broken; fall of slate.

May, 1904, James Smith, miner, Morgan Valley Coal Company, Marion county. He was putting in cut when a piece of sulphur chip struck his eye destroying the sight.

June 1, 1904, Mike Genochis, miner, Bear Creek Coal Company, Wapello county. Badly bruised by fall of slate.

June 2, 1904, E. E. Stuck, miner, Crescent Coal Company, Mahaska county. Head cut and leg bruised by fall of slate.

June 7, 1904, J. C. Jones, miner, Consolidation Coal Company, Monroe county. Foot smashed by fall of slate.

No date, John Coulter, miner, Spring Creek Coal Company, Mahaska county. Ankle bones broken by fall of slate.

June 24, 1904, Roger Griffith, miner, Illinois and Iowa Fuel Company, Wapello county. Crushed by fall of slate.

July 15, 1904, Pete Haney, trapper, arm broken by being caught between car and rib of coal in mine of Dunreath Coal Company, Marion county.

July 11, 1904, William Mason, miner, leg broken by fall of slate in mine of Consolidation Coal Company, Buxton, Monroe county.

August 11, 1904, John Darbollo, track layer, both legs broken by flying coal in mine of Garfield Coal Company, Mahaska county.

August 22, 1904, John Hale, driver, hand mashed by being caught by car in mine of Consolidation Coal Company, Monroe county.

August 23, 1904, Charles Rose, shotfirer, both upper and lower jawbone broken by flying coal in mine of Consolidation Coal Company, Monroe county.

September 1, 1904, G. W. Miller, miner, leg broken by fall of slate in mine of Consolidation Coal Company, Monroe county.

September 17, 1904, Fred Grant, miner, hand mashed by fall of slate in mine of Consolidation Coal Company, Monroe county.

September 27, George Crosby, miner, leg broken by fall of slate in mine of What Cheer Fuel Company, Keokuk county.

September, 1904, Andy Boduar, miner, leg broken by fall of slate in mine of Mammoth Vein Coal Company, Marion county.

October 9, 1904, Sterling Murray, timberman, leg broken by car door falling on him at mine of Consolidation Coal Company of Monroe county.

October 26, 1904, Charles Garland driver, foot mashed by car running over his foot, Consolidation Coal Company, Monroe county.

October 31, 1904, E. L. Shaw, miner, arm broken by flying coal from shot in mine of Consolidation Coal Company, Monroe county.

November 6, 1904, Rees Matthews, miner, cut on head by fall of slate in mine of Ottumwa Brick and Construction Company, Wapello county.

November 6, 1904, David Matthews, miner, body bruised by fall of slate in mine of Ottumwa Brick and Construction Company, Wapello county.

December 1, 1904, Morgan Phillips, miner, leg broken by fall of slate in mine of Ottumwa Brick and Construction Company, Wapello county.

December 26, 1904, Elmer George, miner and driver, leg broken by fall of slate in mine of Ottumwa Brick and Construction Company, Wapello county.

December 12, 1904, C. S. Stone, driver, leg broken by fall of slate in mine of Consolidation Coal Company, Monroe county.

December 17, 1904, Isaac Thomas, miner, internally injured by fall of slate in mine of Consolidation Coal Company, Monroe county.

January, 1905, Hailey Morris, miner, back injured by fall of slate in mine of Lost Creek Fuel Company, Mahaska county.

January 2, 1905, Mike Sirack, cager, foot broken by being run over by car, in mine of Consolidation Coal Company, Monroe county.

January 9, 1905, Mike Brokash, driver, leg broken by being caught by car in mine of Consolidation Coal Company, Monroe county.

January 26, 1905, Sam Rhoder, Jr., miner, collar bone broken by fall of slate in mine of Consolidation Coal Company, Monroe county.

February 6, 1905, Herman Sugar, driver, leg broken by fall of slate in mine of Consolidation Coal Company, Monroe county.

February 6, 1905, T. P. Price, miner, back injured by fall of slate in mine of Phillips Fuel Company, Wapello county.

February, 1905, James Howard, driver, back hurt, fell off chain between car and rib in mine of Mammoth Vein Coal Company, Marion county.

March, 1905, John W. Davis, miner, ribs broken by fall of slate in mine of Mammoth Vein Coal Company, Marion county.

March 14, 1905, Mike Swak, miner, leg broken by fall of slate in mine of Consolidation Coal Company, Monroe county.

April, 1905, Andy Elo, Jr., miner, shoulder dislocated by fall of slate in mine of Mammoth Vein Coal Company, Marion county.

May 4, 1905, George Payton, miner, bruised about the head by fall of slate in mine of Rex Fuel Company, Marion county.

June 9, 1905, Sam Scott, driver, body bruised by being knocked off of car at mine of Raven Coal Company, Mahaska county.

## Non-fatal accidents in District No. 2, for two years ending June 30, 1905.

Date.	Name.	Occupation.	Character of Injury.	Cause of Accident.	Mine Where Accident Occurred.	County.
July 18, 1903	Robert Roberts....	Bellman....	Arm broken.....	.....	Consolidation Coal company.....	Monroe.
July 22, 1903	T. Balzer.....	Refuse mover....	Hand bruised, necessary to amputate hand.....	Fall of slate.....	Crescent Coal Co.....	Maheka.
July 24, 1903	Walter Johnson..	Coupler.....	Hand mashed.....	Fall of slate.....	Consolidation Coal company.....	Monroe.
August 7, 1903	E. T. Ferrand....	Miner.....	Broken leg.....	Fall of slate.....	Illinois and Iowa Fuel company....	Wapello.
August 28, 1903	George Lee.....	Cager.....	Broken leg.....	Engineer lost control of engine and cage dropped to bottom of shaft.....	Consolidation Coal company.....	Monroe.
August 28, 1903	John Nichols.....	Miner.....	Knee dislocated.....	Engineer lost control of engine and cage dropped to bottom of shaft.....	Consolidation Coal company.....	Monroe.
August 28, 1903	Elias Swanson....	Miner.....	Both ankles injured....	Engineer lost control of engine and cage dropped to bottom of shaft.....	Consolidation Coal company.....	Monroe.
September 22, 1903	J. Spears.....	Miner.....	Hand crushed.....	Fall of slate.....	Consolidation Coal company.....	Monroe.
September 23, 1903	C. M. Jones.....	Miner.....	Body bruised.....	Fall of slate.....	Consolidation Coal company.....	Monroe.
August 23, 1903	Alex Beard.....	Miner.....	Fractured ankle.....	Engineer lost control of engine and cage dropped to bottom of shaft.....	Consolidation Coal company.....	Monroe.
September 10, 1903	J. O. Slaughter....	Carpenter.....	Arm broken.....	Fell off scaffold.....	Consolidation Coal company.....	Monroe.
October 9, 1903	Simon Harris.....	Miner.....	Fracture of spin.....	Fall of slate.....	Illinois and Iowa Fuel company....	Wapello.
October 23, 1903	Sampson Hyde....	Coupler.....	Body crushed.....	Caught by cage.....	Consolidation Coal company.....	Monroe.
October 30, 1903	C. J. Johnson....	Miner.....	Body crushed.....	Fall of slate.....	What Cheer Fuel company.....	Keokuk.
November 24, 1903	W. H. Millhouse..	Miner.....	Leg broken.....	Fall of slate.....	Illinois and Iowa Fuel company....	Wapello.
November 25, 1903	Elijah Miller.....	Cager.....	Foot mashed.....	Slipped under cage.....	Brown River mine Consolidation Coal company.....	Wapello.
					Consolidation Coal company.....	Monroe.

December 5, 1903	W. W. Carey	Driver	Blbs broken	Caught by trap door	Consolidation Coal company	Monroe.
December 11, 1903	Richard Graves	Driver	Foot mashed	Car ran over foot	Consolidation Coal company	Monroe.
December 14, 1903	A. Meyers	Timberman	Ankle dislocated	Fall of slate	Consolidation Coal company	Monroe.
January 4, 1904	James Dalziel	Miner	Back injured	Caught under cage	What Cheer Fuel company	Monroe.
January 5, 1904	James Speoe	Miner	Body crushed	Fall of slate	Illinois and Iowa Fuel company	Keokuk.
January 18, 1904	John Black	Gasoline engineer	Hand mashed	Hand caught in cog wheel	Consolidation Coal company	Wapello.
February 12, 1904	R. J. Barber	Driver	Arm broken	Caught between loaded car and roof	Consolidation Coal company	Monroe.
February 16, 1904	Robert Vaughn	Timberman	Both legs broken	Fall of slate	Consolidation Coal company	Monroe.
March 8, 1904	Joe Melcher	Miner	Hip dislocated	Fall of slate	Oskaloosa Coal Mining company	Monroe.
March 4, 1904	Thomas Legon	Driver	Fracture of skull	Caught by car	Consolidation Coal company	Mahaska.
March 6, 1904	S. A. Gantz	Electrician	Leg broken	Fall of slate	Consolidation Coal company	Monroe.
May, 1904	Jas. Smith	Miner	Sight of one eye destroyed	Struck by piece sulphur chip	Morgan Valley Coal company	Monroe.
June 1, 1904	Mike Genochis	Miner	Badly bruised	Fall of slate	Bear creek mine	Marion.
June 2, 1904	E. E. Stuck	Miner	Head cut and leg bruised	Fall of slate	Orescent Coal Co.	Wapello.
June 7, 1904	J. C. Jones	Miner	Foot mashed	Fall of slate	Consolidation Coal company	Mahaska.
Winter, 1904	John Coulter	Miner	Ankles broken	Fall of slate	Spring Creek Coal company	Monroe.
June 24, 1904	Roger Griffith	Miner	Body crushed	Fall of slate	Illinois and Iowa Fuel company	Mahaska.
July 15, 1904	Pete Haney	Trapper	Arm broken	Caught between car and rib	Dunreath Coal Co.	Wapello.
July 11, 1904	Wm. Mason	Miner	Leg broken	Fall of slate	Consolidation Coal company	Marion.
August 11, 1904	John Carbollo	Tracklayer	Both legs broken	Flying coal	Consolidation Coal company	Monroe.
August 22, 1904	John Hale	Driver	Hand mashed	Caught by car	Garfield Coal Co.	Mahaska.
August 23, 1904	Chas. Rose	Miner	Both upper and lower jaw bone broken	Flying coal	Consolidation Coal company	Monroe.
September 1, 1904	G. W. Miller	Miner	Leg broken	Fall of slate	Consolidation Coal company	Monroe.
September 17, 1904	Fred Grant	Miner	Hand mashed	Fall of slate	Consolidation Coal company	Monroe.
September 27, 1904	Geo. Crosby	Miner	Leg broken	Fall of slate	What Cheer Fuel company	Monroe.
September, 1904	Andy Bodnar	Miner	Leg broken	Fall of slate	Mammoth Vein Coal company	Keokuk.
						Marion.

## NON-FATAL ACCIDENTS—CONTINUED.

Date.	Name.	Occupation.	Character of Injury.	Cause of Accident.	Mine where Accident Occurred.	County.
October 9, 1904	Sterling Murray	Timberman	Leg broken	Car door fell on him	Consolidation Coal company	Monroe.
October 26, 1904	Chas. Garland	Driver	Foot mashed	Car ran over foot	Consolidation Coal company	Monroe.
October 31, 1904	E. L. Shaw	Miner	Arm broken	Flying coal	Consolidation Coal company	Monroe.
November 6, 1904	Rees Matthews	Miner	Cut on head	Fall of slate	Ottumwa Brick and Construction Co.	Wapello.
November 6, 1904	David Matthews	Miner	Body bruised	Fall of slate	Ottumwa Brick and Construction Co.	Wapello.
December 1, 1904	Morgan Phillips	Miner	Leg broken	Fall of slate	Ottumwa Brick and Construction Co.	Wapello.
December 26, 1904	Elmer George	Miner	Leg broken	Fall of slate	Ottumwa Brick and Construction Co.	Wapello.
December 12, 1904	C. S. Stone	Driver	Leg broken	Fall of slate	Consolidation Coal company	Monroe.
December 12, 1904	Isaac Thomas	Miner	Internally injured	Fall of slate	Consolidation Coal company	Monroe.
January, 1905	Hailey Morris	Miner	Back injured	Fall of slate	Lost Creek Fuel Co.	Monroe.
January 2, 1905	Mike Strack	Cager	Bones of foot broken	Run over by car	Consolidation Coal company	Monroe.
January 9, 1905	Mike Brokash	Driver	Leg broken	Caught by car	Consolidation Coal company	Monroe.
January 26, 1905	Sam Rhodes, Jr.	Miner	Cellar bone broken	Fall of slate	Consolidation Coal company	Monroe.
February 6, 1905	Herman Sugar	Driver	Leg broken	Fall of slate	Consolidation Coal company	Monroe.
February 6, 1905	T. P. Price	Miner	Back injured	Fall of slate	Consolidation Coal company	Monroe.
February 6, 1905	Jas. Howard	Driver	Back hurt	Squeezed between car and rib of coal	Phillips Fuel Co.	Wapello.
March, 1905	John W. Davis	Miner	Ribs broken	Fall of slate	Mammoth Vein Coal company	Marion.
March 14, 1905	Mike Swak	Miner	Leg broken	Fall of slate	Mammoth Vein Coal company	Marion.
April, 1905	Andy Eto, Jr.	Miner	Shoulder dislocated	Fall of slate	Consolidation Coal company	Monroe.
May 4, 1905	Geo. Payton	Miner	Bruised about head	Fall of slate	Mammoth Vein Coal company	Marion.
June 9, 1905	Sam Scott	Driver	Body bruised	Knocked off car	Rex Fuel company	Marion.
					Raven Coal Co.	Mahaska.

### MAHASKA COUNTY.

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Mahaska, for years the leading coal county of the State but which for the past five years has shown a decrease in its production, is again coming to the front with new mines that are well equipped with the latest improved machinery, and these mines give every assurance of an increase in the production the coming year.

This county has still a large and undeveloped coal area and with the new mines already opened and under construction will again forge to the front.

The Garfield Coal Company has opened a new slope, No. 3, two miles west of Beacon; also one two and one-half miles southwest of Evans. This shaft is sunk in a new field of coal with four or five hundred acres proven to be underlaid with a thick seam. This shaft will be equipped with modern machinery and will have a capacity of about 1,000 tons daily.

Mr. William Cricket has a shaft in the vicinity of White City, which is equipped to hoist a large tonnage.

Bolton & Hoover Coal Company of Bolton is a new mine with Mr. J. W. Canty in charge, and this mine is a good producer. The Union Coal company, two miles north of Buxton, has a new mine located on the North-Western railroad. The National Union Coal company, located three and one-half miles southwest of Beacon, is a new mine on the C., R. I. & P. railway.

This county produced for the biennial period ending June 30, 1905, 1,206,837 tons of coal

There were five fatal and seven non-fatal accidents reported from the mines of this county during the past two years.

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### MONROE COUNTY.

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But a very small portion of this county is included in the Second District, the county properly being a part of the First District, but on account of that portion of the county lying north and east of the C., B. & Q. railroad being so difficult for the inspector in the First District to reach by railroad, and the tonnage decreasing so rapidly in the Second District to make the districts more equal the county was divided as above. The portion of the county in the Second District includes the mines of the Central Coal Company at Lockman, the Miller Creek Coal Company with mines near Coalfield, and the Consolidation Coal Company with mines near Buxton. This last is one of the largest companies in the State, and they are now operating four large mines in the vicinity of Buxton and are at present engaged in opening up a fifth, and this last one gives evidence of being a large producer. This company has the best equipped and best ventilated mines in the State. For the two years ending June 30, 1905, this company produced more than a million and a half tons of coal.

The Central Coal Company located near Lockman also does an extensive shipping business. The Miller Creek Coal Company have mines near Coalfield and do a good business.

### WAPELLO COUNTY.

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This county has steadily increased the output of coal for the last ten years, and in this last biennial period has produced 691,212 tons. The coal in this county is fine for steam and domestic purposes and the seam varies from three and one-half to five feet in thickness.

Mr. George Ramsay, of the Garfield Coal Company of Mahaska county, has prospected a coal field about three and one-half miles north of Ottumwa. The results were very favorable and this company will open and equip a mine for a large tonnage.

C. A. Hoover of Oskaloosa is prospecting south of Ottumwa some four miles, on a large tract of land, and Henry Phillips is drilling north and east of Rutledge, while the Jones Bros. are drilling north of the present mine they are operating.

There are fifteen mines in this county; five of these are shipping mines located on the Chicago, Burlington & Quincy Railroad, the Chicago, Rock Island & Pacific Railroad and the Milwaukee Railroad.

The reports coming to this office would indicate that several new mines will be opened up in the near future.

There were twelve non-fatal accidents reported from the mines of this county for the biennial period ending June 30, 1905.

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### MARION COUNTY.

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This county has been a large coal producer for many years and is constantly increasing its coal tonnage. The coal measures that are now worked are among the thickest in the State, ranging from four to twelve feet in thickness, and found at a depth of from fifty to 150 feet.

The principal field is now worked by the Mammoth Vein Coal company, who, by the way, are the pioneer coal men in this county. This company, in addition to their No. 5 mine, has in the last two years opened up three large slopes. Two of them will have steam power, and the other one in addition to their No. 5 mine will be equipped with electric haulage. When these mines are fully developed this company will be one of the largest coal producers in the State.

There are at present numerous drilling machines at work and the results from this prospecting seem to be satisfactory, as new companies are buying large tracts of land with a view to opening mines, and other large companies are constantly adding to their already large holdings.

Several small openings have been made in various parts of the county which will mine coal through the fall and winter months, and furnish employment to a number of men.

**VAN BUREN COUNTY.**

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This is another of the small coal producing counties of the State. The mines are located in the vicinity of Douds Station, and in and near Farmington.

Findlay & Son have operated mines very profitably for a number of years about two miles north of Douds Station. They haul the coal produced to Douds Station in wagons and deliver the same to the C., R. I. & P. Railway company, who handle their entire output. By reason of their having a contract with the railroad company they are able to operate their mines the entire year. The Ratcliff Coal Company, also located north of Douds, supply coal to the Rock Island road, delivering it in wagons, and they operate the entire year.

A number of small mines located near Douds and near Farmington do a good business supplying the local trade during the fall and winter months. The coal in this county is of a good quality and the veins run from three to four feet in thickness.

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**KEOKUK COUNTY.**

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This county at one time enjoyed the distinction of being one of the large coal producing counties of the State, but of late years the coal production of this county has become less and less each year, until now it produces less than one-fourth what it did ten years ago, and unless new fields are opened soon it will not be long until it will cease to be classed with the coal producing counties of the State. Whereas, in former years hundreds of thousands of tons of coal were shipped from this county, now the business is for the most part local and the small mines are operated only during the fall and winter months. For the year ending June 30, 1894, this county produced 215,625 tons of coal, and ten years later (1904) the production had fallen to 52,375 tons, and each year this tonnage will be less as no new mines are being developed and the older ones are being worked out and abandoned.

The coal production of this county for the two years ending June 30, 1905, was 70,566 tons. One fatal and two non-fatal accidents were reported from the mines of this county during the biennial period ending June 30, 1905.

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**DAVIS COUNTY.**

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But little coal is mined in this county, but what is produced is of a very good quality, the vein averaging about three feet in thickness. The most of the operations of mining are confined to the vicinity of Laddsdale, Lunsford and Belknap and one mine is located near Floris.

It has been reported to this office that a coal mining company was recently organized at Bloomfield. This company has drilled several prospect holes near Belknap and have found a good vein of coal averaging three and one-half feet in thickness. Preparations are being made to open a mine and equip it for a good tonnage.

No fatal or non-fatal accidents were reported from the mines of this county during the past two years.

Possibly at some time in the future this county will produce much more coal than it does now, as this county joins Appanoose county, which is one of the best producing counties in the State.

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### WARREN COUNTY.

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The coal tonnage in this county runs from ten to fifteen thousand tons yearly. The larger mines of the county are located near Somerset. But two of these do a shipping business. Most of the mines of the county are purely local and are in operation only during the fall and winter months. A few mines are operated near Milo, some near Liberty Center, and some near Lacona.

Owing to the fact that the railroad facilities are not the best in this county partly explains the small production of the county. With the advent of more railroads in the county a larger tonnage will be mined, as there is no doubt but what there is considerable land underlaid with coal in the county.

Two different seams have been worked; the upper seam is about three feet thick and is worked long-wall, the lower seam is somewhat thicker and is worked on the room and pillar plan.

This county produced for the biennial period 20,120 tons of coal. No fatal or non-fatal accidents were reported from the mines of this county during the past two years.

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### JEFFERSON COUNTY

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The production of coal in this county is very limited. While coal has been mined in the county for a number of years, operations have not been extensive as the demand is purely local. There are a number of small mines south and west of Fairfield that do a very profitable business during the fall and winter months in supplying the local demand of Fairfield and other towns in the county. The Perlee Fuel company have recently opened a new mine near Perlee, and the outlook for the mine is good. The coal in this county is about three and one-half feet in thickness and generally free from impurities. No accidents were reported from the mines of this county during the past two years.

## LIST OF COMPANIES, SUPERINTENDENTS, ETC., IN SECOND DISTRICT.

## MAHASKA COUNTY.

Name of Company.	Superintendent.	Postoffice Address.	Shaft or Slope.	Plan of Working.	How Ventilated.	Power Used.	Shipping or Local.
Harry Little Coal company.....	Harry Little.....	Pekay.....	Slope.....	Room and pillar.	Furnace.....	Horse.....	Local.....
A. E. Black Coal company.....	A. E. Black.....	Beacon.....	Shaft.....	Room and pillar.	Jet.....	Horse.....	Local.....
Murray Coal company.....	Jas. Neagle.....	Oskaloosa.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Garfield Coal company No. 2.....	J. H. Ramsey.....	Oskaloosa.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Williams Bros. Coal company.....	E. F. Williams.....	New Sharon.....	Slope.....	Room and pillar.	Fan.....	Horse.....	Local.....
Raven Coal company.....	N. J. Kissick.....	Oskaloosa.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Lost Creek Coal company.....	J. M. Timbrell.....	Lost Creek.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Barrowman Coal company.....	J. H. Smith.....	Oskaloosa.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Everland Coal company.....	R. Barowman.....	Beacon.....	Sh. ft.....	Room and pillar.	Furnace.....	Horse.....	Local.....
National Union Coal company.....	John Price.....	Beacon.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Swan Coal company.....	M. J. Ward.....	Edyville.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.....
Union Coal company.....	Jesse Swan.....	Oskaloosa.....	Slope.....	Room and pillar.	Furnace.....	Steam.....	Shipping.....
Bolton & Hoover Coal company.....	J. H. Sowden.....	Bolton.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Crescent Coal company.....	John Cauty.....	White City.....	Slope.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Cunningham Coal company.....	Jas. Chew.....	Oskaloosa.....	Shaft.....	Room and pillar.	Fan.....	Horse.....	Local.....
Rock Fuel company.....	John Ross.....	Bukey.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Whitebreast Fuel company.....	W. A. Duffee.....	Pekay.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.....
Kennebec Coal company.....	Owen Reese.....	Muchakineck.....	Slope.....	Room and pillar.	Furnace.....	Horse.....	Local.....
Schultz Coal company.....	A. Love.....	Oskaloosa.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.....
Beacon Coal company.....	Fred Schultz.....	Beacon.....	Slope.....	Room and pillar.	Furnace.....	Horse.....	Local.....
	Andrew Larson.....						

## MARION COUNTY.

Name of Company.	Superintendent.	Postoffice Address.	Shaft or Slope.	Plan of Working.	How Ventilated.	Power Used.	Shipping or Local.
Hayse Coal company.....	Thos. Hayes	Knoxville.	Slope.	Room and pillar.	Stove.....	Horse....	Local.
Knoxville Coal company.....	A. J. Booth	Flagler	Shaft.	Room and pillar.	Stove.....	Horse....	Local.
Bunting & Kersey Coal company	J. F. Bunting	Flagler.	Slope.	Room and pillar.	Furnace	Steam...	Shipping.
Cedar Creek Coal company.....	Jas. A. Jones	Hamilton	Shaft.	Room and pillar.	Fan.....	Steam...	Local.
Dielman Coal company.....	Jno. R. Dielman	Pella	Shaft.	Room and pillar.	Natural.	Horse....	Local.
J. M. Oliver Coal company.....	J. M. Oliver	Harvey	Shaft.	Room and pillar.	Fan.....	Steam...	Shipping.
Mammoth Vein Coal Company No. 5	J. A. J. Powers	Hamilton	Slope.	Room and pillar.	Fan.....	Steam...	Shipping.
Mammoth Vein Coal Company No. 6	J. A. J. Powers	Hamilton	Slope.	Room and pillar.	Fan.....	Horse....	Shipping.
Mammoth Vein Coal Company Nos. 10 & 11.	J. A. J. Powers	Hamilton	Slope.	Room and pillar.	Furnace	Horse....	Shipping.
Punreath Coal company.....	S. R. Rawlings	Punreath.	Shaft.	Room and pillar.	Fan.....	Steam...	Shipping.
Pleasant Valley Coal company	Robt. Hunter	Hamilton	Slope.	Room and pillar.	Furnace	Horse....	Local.
Schultz & Snider Coal company	S. F. Schultz	Hamilton	Shaft.	Room and pillar.	Furnace	Steam...	Shipping.
Ames Coal company.....	L. Davis	Flagler	Drift.	Room and pillar.	Furnace	Steam...	Shipping.
Ames Coal Company No. 7	Jas. A. Wilson	Hamilton	Slope.	Room and pillar.	Grate....	Steam...	Shipping.
Barber Coal company.....	D. Phillips	Knoxville.	Slope.	Room and pillar.	Jet.....	Horse....	Local.
Barber Coal company	J. Phillips	Pella	Shaft.	Room and pillar.	Fan.....	Steam...	Shipping.
Morgan Valley Coal company	J. Buwalda	Pella.... Valley	Shaft.	Room and pillar.	Steam Jet	Steam...	Local.
Hayse Coal company.....	L. E. Phillips	Knoxville	Shaft.	Room and pillar.	Fan.....	Steam...	Shipping.
Yonkon Coal company.....	J. B. Vriezelar.	Oley.....	Slope.	Room and pillar.	Furnace	Horse....	Local.

## WAPELLO COUNTY.

Phillips Fuel company.....	A. J. Eakin.....	Ottumwa.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
South Ottumwa Coal company.....	Willis Groome.....	Ottumwa.....	Shaft.....	Room and pillar.....	Furnace.....	Horse.....	Local.....
Star Coal company.....	Is. F. Gauders.....	Ottumwa.....	Slope.....	Room and pillar.....	Fan.....	Steam.....	Local.....
Anchor Coal company No. 2.....	W. R. Baum.....	Kadisdale.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
Brown Bros. Coal company.....	Chas. Brown.....	Ottumwa.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Local.....
Ottumwa Brick & Construction company.....	D. J. Leary.....	Ottumwa.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Local.....
Cartoon Coal company.....	W. J. Royle.....	Willard.....	Shaft.....	Room and pillar.....	Furnace.....	Horse.....	Local.....
Green Oak Coal company.....	J. E. Lally.....	Ottumwa.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Local.....
Green Oak Coal company.....	David Jones.....	Ottumwa.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
Reese Coal company.....	A. D. Larned.....	Ottumwa.....	Shaft.....	Room and pillar.....	Fan.....	Horse.....	Local.....
Styers Bros. Coal company.....	Edward Sizer.....	Ottumwa.....	Slope.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
Bear Creek coal company.....	Jacob Allen.....	Bear Creek.....	Slope.....	Room and pillar.....	Fan.....	Horse.....	Local.....
Waddle Bros. Coal company.....	J. Waddle.....	Ottumwa.....	Slope.....	Room and pillar.....	Furnace.....	Horse.....	Local.....

## KEOKUK COUNTY.

Maxwell Coal company.....	Robt. Maxwell.....	What Cheer.....	Shaft.....	Room and pillar.....	Natural.....	Horse.....	Local.....
Karston Bros. Coal company.....	Tom Karston.....	What Cheer.....	Shaft.....	Room and pillar.....	Natural.....	Horse.....	Local.....
Grudgiga Bros. Coal company.....	Dan Grudgigas.....	What Cheer.....	Shaft.....	Room and pillar.....	Natural.....	Horse.....	Local.....
Moffat, Milburn & Kuhns Coal company.....		What Cheer.....	Shaft.....	Room and pillar.....	Natural.....	Horse.....	Local.....

## MONROE COUNTY.

Central Coal Company No. 1.....	T. L. Evans.....	Lockman.....	Slope.....	Room and pillar.....	Furnace.....	Steam.....	Shipping.....
Central Coal Company No. 2.....	T. L. Evans.....	Lockman.....	Slope.....	Room and pillar.....	Furnace.....	Horse.....	Shipping.....
Consolidation Coal Company No. 10.....	B. C. Buxton.....	Buxton.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
Consolidation Coal Company No. 11.....	B. C. Buxton.....	Buxton.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
Consolidation Coal Company No. 12.....	B. C. Buxton.....	Buxton.....	Shaft.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
Consolidation Coal Company No. 13.....	B. C. Buxton.....	Buxton.....	Slope.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....
Ackers Coal company.....	Jas. Boden.....	Coalfield.....	Slope.....	Room and pillar.....	Furnace.....	Horse.....	Shipping.....
Miller Creek Coal company.....		Coalfield.....	Drift.....	Room and pillar.....	Fan.....	Steam.....	Shipping.....

## VAN BUREN COUNTY.

H. Findlay & Son Coal company.....	H. Findlay.....	Douds.....	Shaft.....	Room and pillar.....	Furnace.....	Horse.....	Shipping.....
Hassler & Company Coal company.....	John Hassler.....	Farmington.....	Shaft.....	Room and pillar.....	Furnace.....	Horse.....	Shipping.....
A. R. Gardener Coal company.....	A. R. Gardener.....	Seatesport, R. R. 1.....	Shaft.....	Room and pillar.....	Furnace.....	Horse.....	Local.....
Ratchiff Coal company.....	H. L. Ratchiff.....	Douds.....	Shaft.....	Room and pillar.....	Furnace.....	Horse.....	Shipping.....
Cahill Coal company.....	P. M. Cahill.....	Farmington.....	Shaft.....	Room and pillar.....	Furnace.....	Horse.....	Local.....

## WARREN COUNTY.

Name of Company.	Superintendent.	Postoffice Address.	Shaft or Slope.	Place of Working.	How Ventilated.	Power Used.	Shipping or Local.
Diamond Coal company.....	Bert W. Williams.....	Lacona.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.
Bryant Coal company.....	S. C. Bryant.....	Milo.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.
Somerset Coal company.....	R. W. Earle.....	Somerset.....	Shaft.....	Room and pillar.	Fan.....	Horse.....	Shipping.
Uttersen & Milligan.....	D. L. Uttersen.....	Carlisle.....	Shaft.....	Long wall.....	Furnace.....	Horse.....	Local.
Bales Coal company.....	M. D. Bales.....	Milo.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.

## JEFFERSON COUNTY.

Perlee Fuel company.....	B. B. Stuff.....	Perlee.....	Slope.....	Room and pillar.	Grate.....	Horse.....	Local.
George T. Stever company.....	Geo. T. Stever.....	Fairfield.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.

## DAVIS COUNTY.

J. M. Stokle Coal company.....	J. M. Stokle.....	Florida, R. F. D. No. 8.....	Slope.....	Room and pillar.	Furnace.....	Horse.....	Local.
Big Diamond Coal company.....	A. C. Lunsford.....	Lunsford.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.
C. D. Sharp mine.....	C. D. Sharp.....	Ledsdale.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.

TABLE No. 1.

Showing number of mines, output of coal, number of miners and other employees in District No. 2, for year ending June 30, 1904.

Name of County.	Number of mines.	Amount of coal of all kinds pro- duced.	Number of miners employ'd.	Number of other inside employes.	Number of outside employees.	Total number of employees.
Mahaska .....	14	530,428	872	226	150	1,248
Warren .....	5	10,637	42	8	9	59
Keokuk .....	2	52,375	30	28	19	127
Van Buren .....	6	17,844	33	5	15	58
Marion .....	18	346,629	581	144	81	806
Monroe .....	7	690,427	902	379	152	1,433
Jefferson .....	1	875	8	0	1	4
Davis .....	1	125	4	4	1	9
Wapello .....	12	323,188	581	154	106	791
Total .....	72	1,972,528	3,048	948	584	4,580

TABLE No. 2.

Showing number of mines output of coal, number of miners and other employees in District No. 2, for year ending June 30, 1905.

Name of County.	Number of mines.	Amount of coal of all kinds produced.	Number of miners employed.	Number of other in- side employes.	Number of outside employees.	Total number of em- ployes.
Mahaska .....	22	676,409	1,071	289	149	1,509
Warren .....	5	9,483	48	11	9	68
Keokuk .....	3	18,191	28	8	7	44
Van Buren .....	6	12,648	24	5	15	44
Marion .....	19	372,855	601	159	80	840
Monroe .....	7	987,770	1,114	335	97	1,643
Jefferson .....	2	2,060	9	1	2	12
Davis .....	3	1,115	11	6	4	21
Wapello .....	12	368,009	665	149	106	910
Total .....	82	2,448,550	3,572	963	459	4,994



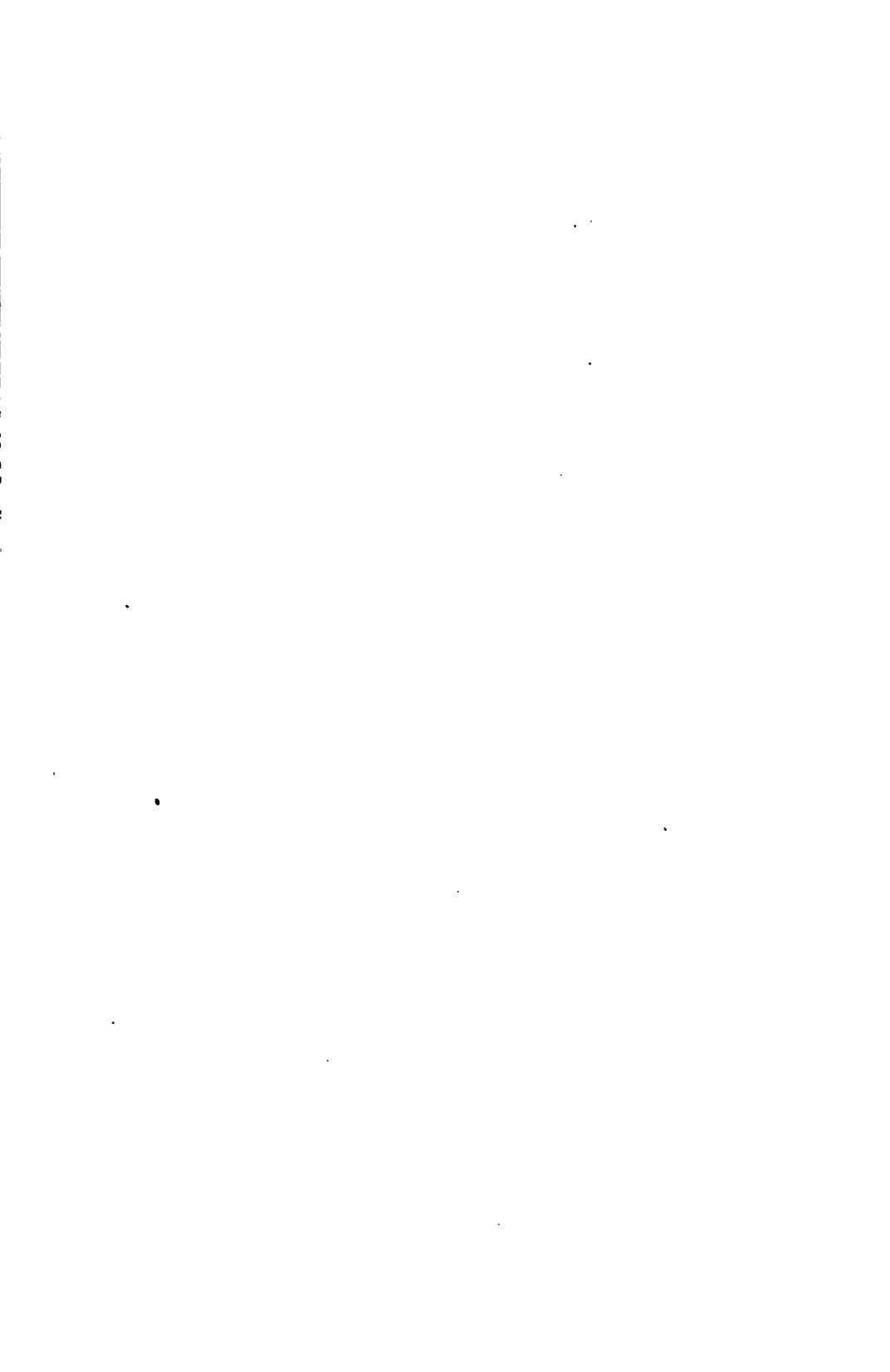
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## **THIRD DISTRICT.**

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LETTER OF TRANSMITTAL.

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HON. ALBERT B. CUMMINS, Governor of Iowa.

*Sir*,—I have the honor to submit herewith the report of the Third Inspection District, covering the biennial period ending June 30, 1905.

Very respectfully,

EDWARD SWEENEY,

*Inspector Third District.*



### REPORT OF THIRD DISTRICT.

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This district includes the following counties as producers of coal: Polk, Jasper, Boone, Webster, Greene, Dallas, Guthrie and Scott.

It is difficult to determine the whole number of mines producing coal within the territorial jurisdiction of the Third Inspection District, as there are so many small openings in the district that employ from one to three men. Such places produce some coal, but to secure data as to tonnage is almost impossible. There are, however, more than sixty shipping mines in the counties above named, and over one hundred mines covered by observation of the entire district. There have been opened, developed, or under construction during the biennial period twenty-six mines. Several more are in contemplation. Twenty-nine mines have been abandoned in the district during the biennial period. These were mostly small local mines employing during the fall and winter months from four to ten men.

#### WORK AND WAGES.

Although the mines of the district have not worked steadily the past few months, yet the fact remains that the tonnage of the district has increased materially and during the past year there has been mined in the district more than 2,000,000 tons of coal, an excess, as shown by the tables, over what has been mined in former years. This increased tonnage is due to the fact that many more miners were employed during the past year in the mines of the district than were ever employed before.

During the month of April, 1904, all the coal mines of the State were idle for about three weeks, owing to a difference of opinion as to terms of the wage scale agreement which, however, was amicably adjusted, thanks to the good sense and business judgment of our miners' officers and operators' association, and the wages in our mining industry will remain stable and unchanged until April 1, 1906. The rate is satisfactory and good, compared with other industries; in fact it is generally conceded that our coal miners have a wage scale and employment conditions that are suggestive of intelligent conservatism in the management of their organization and negotiations with the Iowa coal operators. It is an evidence of intelligence and honesty in the joint wage movement existing between our coal operators and coal miners that merits consideration.

Work has been dull for several months and the mine workers net earnings have diminished accordingly. The Iowa coal operator requires a close vigilance to stay the crowding encroachments of cheap coal produced in eastern fields, where nature has favored the mine owner with a thick coal which is usually easily mined.

### POLK COUNTY.

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Polk county ranks as the second coal producing county in the State of Iowa; the first in the State being Monroe county, situated in the southeastern part of the State. The future prospects of Polk county in the coal business are bright, owing to the fact that there were recently opened up, several new mines, which will be large coal producers and do a large shipping business when fully developed. The majority of these new mines are equipped with the latest improved machinery which will facilitate the handling of a large tonnage, and these new mines will give employment to several hundred more men. There has also been a great deal of prospecting going on in this county within the past few months, and if reports are correct, it will be a question of only a short time until Polk will be the leading coal county in the State.

There are more than thirty coal producing mines in Polk county at the present time and a number of these have a capacity of from 500 to 700 tons per day. Out of the above number of mines there are ten or fifteen which depend entirely on local trade throughout the fall and winter months and do a very profitable business at this season of the year.

The coal fields in Polk county start in the southeastern part of the county and extend as far north as Enterprise. The majority of the mines are within a radius of six miles of the court house. While there is considerable coal shipped into Des Moines for local consumption, at the same time we have several large railroad mines that ship their entire output to the north and west and do not supply any coal for local consumption. In fact several thousand more tons of coal are mined here each year than could possibly be used in Des Moines and Polk county.

The increased growth of the manufacturing business in Des Moines has had much to do with the development of the coal industry of Polk county. Many manufacturing establishments are here; others are coming, for they realize the value of good railroad facilities and plenty of good fuel right at hand, and these Des Moines and Polk counties have to offer. This influx of manufacturing establishments offers an incentive to coal operators to develop this field, and we look for an increased growth in the coal industry the coming year.

Two fires have occurred in this county during the biennial period. On the night of August 13, 1904, fire destroyed the shaft house and a portion of the dump trestle of the Coaldale Fuel Company, burned two cars of coal standing on the track near the mine, a large amount of valuable machinery, and resulted in throwing about 150 men out of employment until the shaft house was rebuilt. The property loss approximated close to ten thousand dollars.

On November 19, 1904, fire destroyed the engine and boiler house of the O. K. Coal Company, located north of Des Moines, entailing considerable of a loss.

#### NEW MINES OPENED.

The West Riverside Coal Company has opened up a new mine known as No. 2, on the Interurban Railroad northwest of Des Moines, and about one-

half mile east of their No. 1 shaft. This mine is being equipped with modern machinery and when fully developed will give employment to 150 or 200 miners.

Walnut Creek Coal Company mine is located southwest of the city of Des Moines and has railroad connections with the C., M. & St. Paul Railroad. This mine when fully equipped will employ from fifty to seventy-five men.

The Bennett Bros., old and experienced coal men, have opened up a large mine southwest of Des Moines. The mine is well equipped and will furnish employment to over 100 men.

The Maple Block Coal Company has opened by shaft a new mine known as No. 2, located northeast of Des Moines. This is a good property and is sure to figure prominently in the coal business of Iowa for a long period of years. Some 150 miners are employed and shipping is done over the Rock Island railroad. The machinery and equipment are first class, and the management very capable men.

The Hollingsworth Coal Company of Des Moines has recently sunk a shaft 7 x 14 feet in size and 156 feet deep. The location is about three and one-half miles southwest of Des Moines. The coal is from four to five feet in thickness and is of a good quality. Several hundred acres of coal was proven ere sinking was commenced. This is sure to prove a valuable property and ought to be good for a number of years.

The Deer Creek Coal Company mine is located about a mile and a half from the Enterprise mine, along the same line of railroad. This mine is equipped to handle a large tonnage. The company has also erected a large number of houses to accommodate their employes.

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## BOONE COUNTY.

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Boone county ranks second in coal production in the Third District, its output for the year ending June 30, 1904, being 345,472 tons, and for the year ending June 30, 1905, 421,802 tons, making a total of 767,274 tons for the biennial period. This production shows a net gain of 192,919 tons of coal over the preceding biennial period.

There are seventeen mines in operation in this county, with an annual output of more than 350,000 tons of coal. All of these mines but three are shipping mines and are operating fairly regular during the entire year.

The coal measures of Boone county extend north and south across the entire county, along the Des Moines river. The principal mining, however, is done around Fraser and Boonsboro, in the north and central portions of the county. Some small mines are in operation in the southern part of the county, but little mining is done. Formerly there was a great deal of coal mined in the vicinity of Angus, and while the vein there ranges from four to six feet in thickness there is usually a large volume of sand and water overlaying a thin strata of slate, making a bad roof, and the coal can not be mined at a profit.

The coal in Boone county is of an excellent quality for commercial purposes and is found at depths varying from thirty to two hundred and fifty feet.

The mines around Boonsboro have direct connection with the main line of the Chicago & Northwestern railroad, while the mines at Fraser connect with the Newton & Northwestern, and the Minneapolis and St. Louis lines running north; thus affording excellent facilities for the shipment of coal into the territory where no coal is produced. The smaller mines not doing a shipping business supply the local demand only and are usually operated through the fall and winter months.

This county has for years been a large producer and will continue to be for many years to come. While the vein is not as thick as in the central part of the Iowa coal field, yet it is of a uniform thickness and of a good quality and is said to be mined at a profit to both the operator and the miner.

There has been a great deal of prospecting done recently west of Boone, and reports coming to the inspector's office would indicate that there will be some new openings in this field in the near future.

Among the largest coal producers in this county, are the Boone Valley Coal & Railroad Company, which operates four shafts and one slope near Fraser and produce nearly one-third of the entire tonnage of the county. The W. D. Johnson Coal Company, the Crowe Coal Mining Company, the Heaps & Crowe Coal Company, the Rogers Coal Company and the Heaps Coal Company. These latter are located near Boonsboro.

The condition of the mines in Boone county have been much improved in late years, especially with regard to ventilation, safety catches, and covers on the cages, and other safety appliances, escape shafts and better traveling ways.

There were two fatal and six non-fatal accidents reported from this county for the biennial period ending June 30, 1905.

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### JASPER COUNTY.

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Jasper county produces annually over 300,000 tons of coal, being the third largest coal producing county in the Third District. Coal has been mined in this county for more than forty years. Veins of coal in this county run from three to six feet in thickness.

The Colfax Consolidated Coal Company's mines are among the largest in the State. This company operates two large mines, Nos. 6 and 7, the former located three miles south of Colfax, and the latter at Seevers, four miles from Colfax. They are now opening another mine, No. 8, and this new mine will be connected with the switch running up to No. 7 mine. They are equipping their No. 8 with the latest and best machinery, and when the mine is fully developed it will be one of the largest coal producers in Jasper county and will rank among the best in the State.

Three miles south of Newton is the oldest mining field in the county and mining operations are still carried on there. At present four good local mines are operated, viz., Snooks, Listers, Carsons and French. They employ from six to fifteen miners each during the fall and winter months and the coal from these mines is sold locally and in Newton. There is also the

Worrick Bros. Coal Company of Colfax with an output of about 5,000 tons per year, and the C. M. Norris Company of Prairie City with a lesser production. Other small mines employing from two to six men in the winter months are located at different parts of the county. All the mines in this county are worked on the room and pillar plan and furnish employment to about 700 miners and other workmen.

The Diamond Coal Company opened up a new mine the fall of 1904. This mine is located one and one-half miles northeast of Mitchellville and is a shaft opening, 128 feet deep. The vein is about four feet in thickness of a very good quality. The mine will depend on local trade entirely as they do not have railroad connections.

There were two fatal and seventeen non-fatal accidents in the mines in this county during the past two years.

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### WEBSTER COUNTY.

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Webster county with fifteen mines in operation produces annually about 160,000 tons of coal. Nine of these mines do a shipping business and six supply the local demand only. Nearly 500 men are furnished employment.

The principal coal fields in this county are located near Lehigh, Coalville and Kalo. Owing to the fact that Webster county occupies the extreme northern part of the Iowa coal fields gives to the county an excellent market for its output in the counties north and west.

The mines at Lehigh, Kalo and Coalville have connection with the main line of the Chicago Great Western Railway, running north. The mines at Lehigh also have connection with the Crooked Creek Railroad, which runs to Webster City and connects with the main line of the Illinois Central, running east and west.

The local mines usually start mining operations about the first of September and run only through the fall and winter months. The coal in this county varies in thickness from two and one-half to four feet, and is found at depths varying from sixteen to one hundred feet, beneath the surface. The quality of the coal is good and the mines are generally well equipped and in good condition.

Two accidents, one fatal and one non-fatal, occurred in the mines of this county during the biennial period ending June 30, 1905.

### GUTHRIE COUNTY.

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There are a number of small mines in this county, the majority of them being located near Fansler, Bayard and Panora. The Raccoon river runs diagonally across the county and most of the mines are located near the river. None of these mines are large and most of them are too far from the railroads to do a shipping business and they are, therefore, purely local mines employing from five to twenty-five miners during the fall and winter months. The majority of these mines commence taking out coal about the first of September, as that is about the time the local trade begins, and they continue to operate until spring when they shut down till fall again.

On account of lack of shipping facilities the mining of coal has not been developed to any great extent, yet I believe the time is not far distant when the county will produce much more coal than is needed for home consumption. The coal vein in this county does not run as thick as the coal vein in other parts of the State, yet it is easily mined and should be handled at a profit to the operator.

The mines in this county vary in depth from fifty to one hundred and twenty feet and the majority of the shaft mines are operated by horse power, while the miners in the drift mines push their coal out. There were 58,769 tons of coal produced in this county the past two years, and this is a decided increase over the tonnage of former years. But few of the mines make the necessary improvements to store coal ready for the extra demand during the winter months and as a consequence there are many times when the local demand can not be satisfied, and much business is thus lost to the operators.

The mines of this county are all worked on the long-wall system of mining, and the natural conditions favor this method of mining. The coal thus mined is nearly all lumps and is of a good quality, being very hard, bright, and a free burner. I believe with good railroad facilities this coal could be produced as cheaply as in any other part of the State.

On my first tour of inspection of this district I found many of the mines with but one opening. I immediately ordered that the number of men working under such conditions be reduced to four to comply with section 2486 of the State mining laws, until the second opening was made. A number of the companies immediately started to sink escape shafts, while others simply complied with the law by reducing the number of men employed and running on a smaller scale. For the most part the conditions existing in the mines of this county were found to be satisfactory, as regards sanitary conditions, general safety appliances, etc.

No fatal or non-fatal accidents were reported from this county during the past two years.

### GREENE COUNTY.

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But six mines are now in operation in this county, three of which are located at Angus, two at Rippey, and one at Grand Junction. The entire output from these mines is about 18,000 tons yearly. Most of the coal mined is found in the southeastern part of the county, and the coal in this field generally lays near some creek tributary to the north branch of the Raccoon river. There has been a decrease in the production of coal in this county in recent years. Only about one sixth of the former tonnage is mined as compared with that of twenty years ago.

The Keystone Coal Company of Angus is the largest producer in the county at present and it has an annual output of about 7,000 tons. Next comes the Michael Feith mine of Angus with a tonnage of 6,000 annually. Following these are the mines of the Goodwin Coal Company of Grand Junction, the Ditchburn Coal Company of Angus, the Willow Grove Coal Company of Angus and the Snake Creek Coal Company of Rippey. This latter is a new mine opened during the fall of 1904.

The Keystone Coal Company employs from twenty to twenty-five men, and the other companies from eight to twenty each. The Goodwin Coal Company does some shipping. The others run during the fall and winter months, only, and supply the local demand.

But two accidents, one fatal and one non-fatal have been reported from this county during the past two years.

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### SCOTT COUNTY.

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Scott county is located in the eastern part of the State and is a river county. The first coal was mined here more than half a century ago, the principal mines being located in the vicinity of Buffalo and Jamestown, in the southern part of the county.

The coal lies in pockets and is worked by shaft openings at the depth of from fifty to seventy feet. It is hoisted to the surface by the gin method. The seams are from two and one-half to three feet in thickness. Most of the coal in this county is mined by the pick method and after being mined is wedged down, no powder being used.

The important mines in the county are: The Long mine, operating near Jamestown and employing from ten to fifteen men, with an annual output of about 2,000 tons. The Sass Bros. Coal Company near Jamestown employ from eighteen to twenty men and have an annual output of 3,500 tons. The Langwith Coal Company near Jamestown employ from eight to ten men and produce about 2,500 tons annually. Carlin & Buchmeyer near Jamestown employ from twelve to fifteen men and have an output of about 3,500 tons annually.

These mines do not do a shipping business as they are not located on a railroad, and most of the coal is sold at the mines locally, and the balance is delivered by wagons to Davenport and sold there. The coal is of good

quality and is sold at a good price. All the mines in this county have a second opening and are ventilated by furnaces, which supply sufficient ventilation for all requirements.

There were no accidents from the mines of this county reported to this office.

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#### DALLAS COUNTY.

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The coal measures in this county are about the same as in Guthrie county, but not so many mines are in operation. The leading mines are those of the Hutchison Bros. at Dawson, and of the Reese Bros. at Madrid. The former are operating a mine two miles west of Dawson. The depth of the main shaft is eighty feet, and thickness of the vein worked about three and one-half feet. This mine is equipped with steam power and is ventilated with a fan. The output of this mine is about 6,000 tons per year.

The Reese Bros. are operating two mines about six miles south of Madrid. Their mines are also equipped with steam power, and they have a tonnage of about 7,000 per year. Other mines are those of the Vernon Coal Company and William Knox operating mines near Madrid. The Mills Coal Company also operate a small mine near Linden. The mine at Van Meter, formerly one of the largest coal producers in the county, has been closed down for some time. There were two non-fatal accidents reported from this county during the biennial period ending June 30, 1905.

# LIST OF COMPANIES, SUPERINTENDENTS, ETC., IN THIRD DISTRICT.

## POLK COUNTY.

Name of Company.	Superintendent.	Post-office Address.	Shaft or Slope.	Plan of Working.	How Ventilated.	Power Used.	Shipping or Local.
Des Moines Coal company	Chas. Morris.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Saylor Coal company	J. D. Owen.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Smith-Lowe Coal Company No. 8.	E. C. Smith.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Smith-Lowe Coal Company No. 4.	E. C. Smith.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Norwood Coal company	Josh Norwood.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Gibson Coal company	John Gibson.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Maple Block Coal company	C. A. Swanson.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Bloomfield Coal company	George Yarn.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Keystone Coal company	E. M. Gray.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Eagle Coal company	G. M. Holmes.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Local.
Midway Coal company	E. Z. Row.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
West Riverside Coal company	Joseph Jones.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Flint Brick and Coal company	Mike Quinn.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Center Coal company	Isaac Evans.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Oak Park Fuel company	J. P. McClelland.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
O K Coal company	Benj. Mann.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Glenwood Coal company	Caleb Johns.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Elko Coal company	Thos. Beck.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Capital Coal company	Daniel Johns.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Local.
Madison Coal company	Ralph Madison.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Local.
Walnut Creek Coal company	Ben Bosley.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Local.
Economy Coal company	W. E. Evans.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Hollingsworth Coal company	Geo. Simpson.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Bennett Bros Coal company	Edward Herdman.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Coaldale Fuel company	O. M. Carpenter.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Diamond Joe Coal company	John Shuler.	Des Moines.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Enterprise Coal company	G. E. Walters.	Enterprise.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Deer Creek Mining company	H. Bosley.	Enterprise.	Shaft.	Room and pillar.	Fan.	Steam.	Shipping.
Valley Coal & Mining company	H. Bosley.	Commerce.	Shaft.	Longwall.	Fan.	Steam.	Shipping.

## WEBSTER COUNTY.

Name of Company.	Superintendent.	Postoffice Address.	Shafts or Slope.	Plan of Working.	How Ventilated.	Power Used.	Shipping or Local.
Crooked Creek Coal and Railroad company	F. E. Wilson	Webster City	Shaft	Long wall	Fan	Steam	Shipping.
Pleasant Valley Coal company	Jerry Dawson	Fort Dodge	Shaft	Room and pillar	Fan	Steam	Shipping.
Gleason Coal company	John Gleason	Fort Dodge	Shaft	Room and pillar	Fan	Steam	Shipping.
McGraw Coal company	Wm. McGraw	Coalville	Shaft	Long wall	Furnace	Steam	Local.
Craig & Dawson Coal company	Wm. Dawson	Kato	Shaft	Long wall	Fan	Steam	Shipping.
Daily Coal company	Thos. Johnson	Kato	Shaft	Long wall	Fan	Steam	Shipping.
Rogers Coal company	E. W. Collins	Fort Dodge	Shaft	Room and pillar	Fan	Steam	Shipping.
Johnson Coal company	A. P. Campbell	Fort Dodge	Shaft	Long wall	Furnace	Horse	Shipping.
Stem Coal company	S. Bennett	Kato	Slope	Long wall	Fan	Steam	Shipping.
Stem McGraw Coal company	Stem McGraw	Lehigh	Shaft	Long wall	Fan	Steam	Shipping.
Butler & Rhodes Coal company	D. Rhodes	Coalville	Shaft	Long wall	Fan	Steam	Shipping.

## BOONE COUNTY.

Boone Coal and Mining company—No. 1.	Robt. Kennedy	Fraser	Shaft	Long wall	Fan	Steam	Shipping.
Boone Coal and Mining company—No. 3.	Robt. Kennedy	Fraser	Shaft	Long wall	Fan	Steam	Shipping.
Boone Coal and Mining company—No. 5.	Robt. Kennedy	Fraser	Shaft	Long wall	Fan	Steam	Shipping.
Eagle Coal company	W. J. Conway	Boonesboro	Shaft	Long wall	Fan	Steam	Shipping.
Crowe Coal company	Wm. Crowe	Boonesboro	Shaft	Long wall	Fan	Steam	Shipping.
The Heaps Coal company	A. Heaps	Boonesboro	Shaft	Long wall	Fan	Steam	Shipping.
Risher Coal company	Thos. W. Hughes	Boonesboro	Shaft	Long wall	Fan	Steam	Shipping.
Rogers Coal company	Geo. W. Rogers	Boonesboro	Shaft	Long wall	Fan	Steam	Shipping.
Albert Davis Coal company	Albert Davis	Pilot Mound	Shaft	Room and pillar	Fan	Horse	Local.
Big Five Coal company	A. L. Carpenter	Meingona	Shaft	Long wall	Steam jet	Horse	Shipping.
W. D. Johnson Coal company	H. H. Oanfield	Boonesboro	Shaft	Long wall	Fan	Steam	Shipping.
W. H. Bernard Coal company	W. H. Bernard	Madrid	Shaft	Long wall	Furnace	Horse	Local.
Heaps & Crowe Coal company	George Heaps	Boonesboro	Shaft	Long wall	Fan	Steam	Shipping.

## JASPER COUNTY.

Colfax Consolidated Coal Company No. 6.	W. C. Sheppard, Jr.	Colfax	Shaft	Room and pillar.	Fan	Steam	Shipping.
Colfax Consolidated Coal Company No. 7.	W. C. Sheppard, Jr.	Colfax	Shaft	Room and pillar.	Fan	Steam	Shipping.
Colfax Consolidated Coal Company No. 8.	W. C. Sheppard, Jr.	Colfax	Shaft	Room and pillar.	Fan	Steam	Shipping.
Minch Coal company.	Marlin Minden	Colfax	Shaft	Room and pillar.	Furnace	Horse	Local.
French Coal company.	E. P. French	Newton	Shaft	Room and pillar.	Natural	Steam	Local.
Clason Bros. Coal company.	A. Clason	Newton	Shaft	Room and pillar.	Natural	Horse	Local.
Worrick Bros. Coal company.	James Worrick	Colfax	Shaft	Room and pillar.	Furnace	Horse	Shipping.
C. M. Norris Coal company.	O. M. Norris	Pratt City	Drift	Room and pillar.	Furnace	Horse	Local.
Snook Bros. Coal company.	Thos. Snooks	Newton	Shaft	Room and pillar.	Natural	Horse	Local.

## GUTHRIE COUNTY.

Robert MacCulloch Coal company	Robert MacCulloch	Stuart	Drift	Long wall	Natural	Horse	Local.
Balschlet & Marchant Coal company	John Marchant	Panora	Shaft	Long wall	Furnace	Horse	Local.
J. W. King Coal company	J. W. King	Bagley	Shaft	Long wall	Fan	Horse	Local.
Murphy & Mallon Coal company	W. F. Murphy	Yale	Shaft	Long wall	Furnace	Horse	Local.
Scott Coal company	W. H. Scott	Yale	Shaft	Long wall	Natural	Horse	Local.
Slip & Hughes Coal company	J. D. Slip	Yale	Shaft	Long wall	Furnace	Horse	Local.
Mansell Coal company	John Mansell	Yale	Shaft	Long wall	Fan	Horse	Local.
Reese Coal company	David Reese	Panora	Shaft	Long wall	Furnace	Horse	Local.
Jas. Ritchie & Son Coal company	Jas. Ritchie	Stuart	Shaft	Long wall	Furnace	Horse	Local.
Scott Bros. Coal company	Isaac Scott	Bayard	Shaft	Long wall	Furnace	Horse	Local.
Clipper Coal company	Wm. Marchant	Bagley	Shaft	Long wall	Furnace	Horse	Local.
Greenbrier Coal company	E. E. Cleaveland	Jamaica	Shaft	Long wall	Natural	Horse	Local.

## DALLAS COUNTY.

Driscoll Bros. Coal company	Wm. Driscoll	Woodard	Slope	Room and pillar		Horse	Local.
Wm. Knox Coal company	Wm. Knox	Madrid	Shaft	Room and pillar	Fan	Steam	Local.
Rees Bros. Coal company	W. J. Rees	Dawson	Shaft	Room and pillar	Fan	Steam	Shipping.
Hutchinson Bros. Coal company	W. C. Hutchinson						

## SCOTT COUNTY.

Sass Bros. Coal company	Wm. Sass	Jamestown	Shaft	Room and pillar	Furnace	Horse	Local.
Langwith Coal company	E. T. Longwith	Jamestown	Shaft	Room and pillar	Furnace	Horse	Local.
Long Coal company	Lewis E. Long	Jamestown	Shaft	Room and pillar	Furnace	Steam	Local.

## GREENE COUNTY.

Name of Company.	Superintendent.	Postoffice Address.	Shaft or Slope.	Plan of Working.	How Ventilated.	Power Used.	Shipping or Local.
Ditchburn Coal company .....	Robert Ditchburn ..	Angus .....	Shaft .....	Long wall .....	Fan .....	Horse .....	Local .....
Buckeye Coal company .....	M. Feith .....	Rippey .....	Shaft .....	Room and pillar .....	Natural .....	Horse .....	Local .....
Goodwin Coal company .....	Thos. Goodwin .....	Grand Junction .....	Shaft .....	Long wall .....	Fan .....	Steam .....	Shipping .....
Willow Grove Coal company .....	H. A. McElheny .....	Angus .....	Shaft .....	Long wall .....	Fan .....	Steam .....	Local .....
Keysone Coal company .....	Wm. Bennett .....	Angus .....	Shaft .....	Long wall .....	Furnace .....	Horse .....	Local .....
Snake Creek Coal company .....	Geo. Richards .....	Rippey .....	Shaft .....	Room and pillar .....	Exhaust from pump .....	Steam .....	Local .....

TABLE No. 1.

Showing number of mines, output of coal, number of miners and other employees in District No. 3, for year ending June 30, 1904.

Name of County.	Number of mines.	Amount of coal of all kinds produced.	Number of miners employed.	Number of other inside employees.	Number of outside employees.	Total number of employees.
Polk.....	27	906,172	1,547	500	290	2,337
Webster.....	15	156,823	818	121	47	491
Boone.....	16	845,472	789	169	112	1,070
Jasper.....	11	302,569	477	170	62	709
Guthrie.....	12	29,358	187	11	16	164
Dallas.....	5	16,588	49	19	8	76
Scott.....	9	14,983	54	23	6	83
Greene.....	5	15,398	62	11	7	80
Total.....	97	1,846,886	8,428	1,024	587	4,989

TABLE No. 2.

Showing number of mines, output of coal, number of miners, and other employees in District No. 3, for year ending June 30, 1905.

Name of County.	Number of miners.	Amount of coal of all kinds produced.	Number of miners employed.	Number of other inside employees.	Number of outside employees.	Total number of employees.
Polk.....	80	1,094,521	1,905	566	384	2,895
Webster.....	11	123,066	238	95	39	372
Boone.....	15	422,802	766	272	118	1,161
Jasper.....	12	805,027	454	143	74	671
Guthrie.....	15	29,416	102	81	17	150
Dallas.....	5	18,599	43	17	10	70
Scott.....	4	5,210	88	14	6	88
Greene.....	6	17,470	74	23	11	108
Total ..	98	2,010,101	8,615	1,161	604	5,880

TABLE No. 3.

Showing the output of coal of the counties comprising District No. 3 for the past five years.

Counties.	1901	1902	1903	1904	1905
Polk .....	939,600	881,610	996,573	966,172	1,094,521
Boone .....	802,800	288,800	288,055	845,473	422,402
Jasper .....	184,500	153,400	323,312	302,599	805,037
Webster .....	167,800	182,477	159,990	155,823	122,036
Greene .....	12,400	16,192	12,711	15,898	17,470
Guthrie .....	16,750	17,250	18,545	29,355	29,416
Dallas .....	99,400	84,760	19,990	16,586	13,599
Scott .....	22,469	23,973	18,280	14,983	8,210

TABLE No. 4.

Showing tonnage in District 3, for past ten years, with number of fatal accidents and number of employees with tonnage per accident, etc.

Year.	Number of fatal accidents.	Tons of coal mined during each year.	Number of employees.	Tons of coal mined per accident.	Number of employees for each accident.
1896 .....	9	1,059,029	3,976	117,699	376
1897 .....	8	1,201,738	3,649	150,223	456
1898 .....	10	1,370,459	3,883	137,045	388
1899 .....	11	1,555,050	3,437	141,368	312
1900 .....	9	1,508,020	3,819	168,502	477
1901 .....	7	1,607,690	3,904	229,670	556
1902 .....	13	1,659,132	3,373	127,100	298
1903 .....	5	1,833,456	3,061	367,091	733
1904 .....	10	1,846,536	4,989	184,653	499
1905 .....	11	2,010,101	5,890	182,736	689

### ACCIDENTS.

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There were twenty-one fatal and sixty non-fatal accidents during the biennial period, the particulars of which will be found in the details by counties. In canvassing the causes of mine accidents it will be found that the usual story is told; falling slate, premature blast, caught by cage, drivers caught under car, and shotfirers are listed among the killed. Like in all the affairs of life, where any dangerous condition is found, accidents will occur. Men at times expose themselves needlessly to danger, and in very many cases we can see where a "stitch in time saves nine", and with just a little care a death or an injury could have been averted.

Mining rules or mining laws can not prevent such accidents; they are peculiarly a part of man and a feature of the employment. Some men will neglect to put up needed timbers or props, some will use reckless methods in handling powder, and drivers become heedless to all danger and take needless risk. Only a strong guardian could save some men from accidents occurring in our mines.

The mining laws of the State are observed in a satisfactory manner; some of our mine owners are continually instituting plans and ways to make their mines safe and no expense is spared to protect life and provide good ventilation and sanitary conditions.

## Fatal accidents in District No. 3, for two years ending June 30, 1905.

Date.	Name of Deceased.	Occupation.	Cause of Death.	Employed by—	County.
July 6, 1903	Guy Weston Parker	Miner	Fall of slate	Keystone Coal company	Polk.
July 23, 1903	Gus Carlson	Miner	Flying coal	Saylor Coal company	Polk.
August 27, 1903	William Thomas	Miner	Fall of slate	Gilfax Consolidated Coal company	Jasper.
October 30, 1903	Ernest Foreman	Driver	Fall of slate	Gibson Coal Mining company	Polk.
November 17, 1903	Andrew Anderson	Miner	Fall of slate	W. D. Johnson Coal company	Boone.
November 7, 1903	Charles Holmes	Miner	Fall of coal	Maple Grove Coal company	Polk.
December 11, 1903	George Smith	Superintendent	Fall into stump	Pleasant Valley Coal company	Webster.
December 29, 1903	Hoyt Dunakin	Driver	Fall of slate	Saylor Coal company	Polk.
December 27, 1903	Joseph Smith	Miner	Fall of slate	Norwood Coal company	Polk.
June 23, 1904	Harry Gibson	Shotfirer	Flying coal	Gilfax Consolidated Coal company	Jasper.
July 24, 1904	James Crowe	Superintendent	Run over by cars	Keystone Coal company	Polk.
September 7, 1904	Ed Stuart	Driver	Caught by cage	Keystone Coal company	Polk.
October 6, 1904	Wm. Aldler	Miner	Run over by cars	Saylor Coal company	Boone.
October 12, 1904	John W. Logan	Miner	Fall of slate	Litchburn Coal company	Greene.
November 17, 1904	P. A. Brown	Miner	Fall of coal	Saylor Coal company	Polk.
November 30, 1904	Peter Johnson	Miner	Fall of slate	Diamond Joe Coal company	Polk.
January 19, 1905	Sanna Taylor	Miner	Fall of slate	Smith-Lowe Coal company	Polk.
January 19, 1905	John Pason	Miner	Explosion of powder	Oak Park Fuel company	Polk.
January 19, 1905	Henry Connack	Miner	Fall of slate	Bennett Bros. Coal company	Polk.
February 9, 1905	Thomas Hammond	Driver	Run over by cars	Elko Coal Mining company	Polk.
February 6, 1905	Adam Watkum	Miner	Fall of slate	Smith-Lowe Coal company	Polk.

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## Non-fatal accidents in District No. 3, for two years ending June 30, 1905.

Date.	Name.	Occupation.	Character of Injury.	Cause of Accident.	Mine Where Accident Occurred.	County.
July 9, 1903	John Wilding.....	Miner.....	Arm broken.....	Caught in cars.....	Colfax Consolidated Coal Co.....	Jasper.
July 22, 1903	J. T. Jones.....	Timberman.....	Finger out of.....	Ax fell on hand.....	Colfax Consolidated Coal Co.....	Jasper.
July 28, 1903	Geo. Ewing.....	Driver.....	Internally injured.....	Fall of slate.....	Crook Creek No. 4.....	Polk.
September 24, 1903	Jos. Birmingham.....	Laborer.....	Skull broken.....	Fall of slate.....	Saylor Coal Co.....	Webster.
September 20, 1903	Thos. Colson.....	Miner.....	Hip bruised.....	Fall of slate.....	Hanlon Mine.....	Polk.
October, 1903	J. R. Anderson.....	Miner.....	Ankle broken.....	Fall of slate.....	Enterprise Coal Co.....	Scott.
November 11, 1903	Wm. Underwood.....	Miner.....	Collar bone broken.....	Fall of slate.....	Goodwin Coal Co.....	Polk.
November 17, 1903	H. F. Scott.....	Miner.....	Back hurt.....	Fall of slate.....	Colfax Consolidated Coal Co.....	Greene.
November 21, 1903	Jno. Killion.....	Timberman.....	Foot mashed.....	Fall of slate.....	Boone County Coal company.....	Jasper.
November 21, 1903	Andrew Johnson.....	Miner.....	Leg broken.....	Fall of slate.....	Boone County Coal company.....	Boone.
December 8, 1903	Geo. Newcomb.....	Miner.....	Finger pinched off.....	Riding extra.....	Colfax Consolidated Coal Co.....	Boone.
January 14, 1904	Mark Jones.....	Miner.....	Broken leg.....	Fall of slate.....	Des Moines Coal Co.....	Jasper.
January 18, 1904	B. E. McCarty.....	Timberman.....	Hip broken.....	Fall of timber.....	Des Moines Coal Co.....	Polk.
January 20, 1904	John Birmingham.....	Miner.....	Leg broken.....	Fall of slate.....	W. D. Johnson Mine.....	Boone.
January 21, 1904	Fred Norwood.....	Pit foreman.....	Mashed hips.....	Fall of slate.....	Norwood Coal Co.....	Polk.
February 4, 1904	W. J. Jackson.....	Driver.....	Fingers mashed.....	Caught in car.....	West Riverside Coal company.....	Polk.
February 18, 1904	Geo. Cook.....	Miner.....	Rib broken.....	Fall of slate.....	Smith-Lowe Coal company.....	Polk.
February 25, 1904	David Scott.....	Miner.....	Leg broken.....	Fall of slate.....	Smith-Lowe Coal company.....	Polk.
Winter, 1903-1904	T. B. Smith.....	Miner.....	Leg broken.....	Fall of slate.....	Enterprise Coal Co.....	Polk.
March 19, 1904	Malone.....	Miner.....	Ribs fractured.....	Fall of coal.....	Des Moines Coal Co.....	Polk.
April 27, 1904	Roy Mercer.....	Miner.....	Crushed hips.....	Caught by cars.....	Des Moines Coal Co.....	Polk.
May 10, 1904	Chas. Lundeen.....	Roadman.....	Leg broken.....	Fall of rock.....	Rogers Coal Co.....	Boone.

## NON-FATAL ACCIDENTS—CONTINUED.

Date.	Name.	Occupation.	Character of Injury.	Cause of Accident.	Mine Where Accident Occurred.	County.
June 28, 1904	Guy Stover	Miner	Bones in foot broken	Fall of slate	Colfax Consolidated Coal Co.	Jasper.
July 8, 1904	Dave Budle	Cager	Arm broken	Caught by cage	Colfax Consolidated Coal Co.	Jasper.
July 23, 1904	E. H. Ballard	Miner	Arm broken	Fall of slate	Greenbrier Coal Co.	Guthrie.
July 23, 1904	John Sullivan	Driver	Thighs bruised	Falling timbers	Smith-Lowe Coal Co.	Polk.
September 3, 1904	Geo. Wisman	Driver	Leg broken	Fall of slate	Smith-Lowe Coal Co.	Polk.
September 8, 1904	Geo. Rape	Miner	Bruised back	Fall of slate	Colfax Consolidated Coal Co.	Polk.
September 19, 1904	H. DeVan	Driver	Arm broken	Car ran off track	Smith-Lowe Coal Co.	Polk.
September 21, 1904	John Cotton	Miner	Leg broken	Fall of slate	Center Coal Co.	Polk.
September 23, 1904	John Heffron	Miner	Ribs broken	Caught between car and car overhead	Coaldale Fuel Co.	Polk.
October 31, 1904	Ed. Coccaunt	Shotfirer	Leg broken	Flying coal	Enterprise Coal Co.	Polk.
December 1, 1904	Albert Davis	Miner	Leg broken	Fall of slate	Davis mine	Boone.
December 3, 1904	Joe Bostoletti	Miner	Foot broken	Fall of slate	Colfax Consolidated Coal Co.	Jasper.
December 5, 1904	Albert Grandquist	Driver	Ribs broken	Caught between car and timbers	Colfax Consolidated Coal Co.	Jasper.
December 6, 1904	Joe Lilly	Miner	Badly burned	Powder explosion	Maple Block Coal company	Jasper.
January 21, 1905	Peter Frisk	Miner	Leg broken	Fall of slate	Glenwood Coal Co.	Polk.
January 23, 1905	Chas. Evans	Shotfirer	Cut about head	Flying coal	Enterprise Coal Co.	Polk.
January 24, 1905	M. V. Carpenter	Miner	Back hurt	Fall of slate	Smith-Lowe Coal company	Polk.
February 15, 1905	W. Robinson	Driver	Ear cut	Kicked by mule	Marwood Coal Co.	Polk.
February 17, 1905	Jasper Kinney	Miner	Both legs and 8 ribs broken	Flying coal	Keystone Coal Co.	Polk.
February 23, 1905	John Peterson	Miner	Four ribs broken	Fall of slate	Madison Coal Co.	Polk.
February 25, 1905	A. Treveathon	Miner	Four ribs broken	Fall of slate	Colfax Consolidated Coal Co.	Polk.
March 2, 1905	N. E. Satz	Miner	Thumb taken off	Fall of slate	Colfax Consolidated Coal Co.	Polk.

March	4, 1905	Aug. Storchewich..	Miner .....	Two fingers taken off .....	Caught in sheave wheel .....	Colfax Consoli- dated Coal Co.	Jasper.
March	8, 1905	Chas. Krohn. ....	Timberman .....	Back dislocated .....	Fall of slate .....	Colfax Consoli- dated Coal Co.	Polk.
March	10, 1905	Jno. B. Owens .....	Timberman .....	Bruised hips .....	Fall of slate .....	Des Moines Coal Co.	Polk.
April	19, 1905	Jim Watkins .....	Miner .....	Hip dislocated .....	Fall of slate .....	Enterprise Coal Co.	Polk.
April	27, 1905	J. B. Bird .....	Miner .....	Two ribs broken .....	Fall of slate .....	Des Moines Coal Co.	Polk.
May	8, 1905	Peter Axner .....	Timberman .....	Back dislocated .....	Fall of slate .....	Enterprise Coal Co.	Polk.
May	8, 1905	Dominee Bimbi .....	Miner .....	Wrist broken .....	Runaway car .....	Saylor Coal Co.	Polk.
May	21, 1905	Ermet Ward .....	Miner .....	Leg broken .....	Fall of slate .....	Norwood Coal Co.	Polk.
May	22, 1905	Wm. Murray .....	Miner .....	Strained back .....	Caught between mule and car .....	Des Moines Coal Co.	Polk.
May	25, 1905	John Ford .....	Miner .....	Back injured .....	Fall of slate .....	Coalsdale Fuel Co.	Polk.
May	27, 1905	Wm. Turner .....	Shotfirer .....	Arm broken .....	Flying coal .....	Saylor Coal Co.	Polk.
May	28, 1905	Jacob Walters .....	Miner .....	Both legs and one rib broken .....	Fall of coal .....	Center Coal Co.	Polk.
May	8, 1905	H. E. Hathaway .....	Miner .....	Arm broken .....	Fall of slate .....	Oak Park Fuel Co.	Polk.
June	25, 1905	Angelo Biondi .....	Miner .....	Four ribs broken .....	Fall of slate .....	Saylor Coal Co.	Polk.
June	25, 1905	Robert Holmes .....	Miner .....	Hips bruised .....	Fall of slate .....	Colfax Consoli- dated Coal Co.	Jasper.
June	28, 1905	Jacob Walter .....	Miner .....	Leg and ribs broken .....	Fall of coal .....	Center Coal Co.	Polk.

**FATAL ACCIDENTS IN THE THIRD DISTRICT FOR THE YEAR  
ENDING JUNE 30, 1904.****GUY WESTON PARKER.**

Guy Weston Parker, a miner, in the employ of the Keystone Coal Company of Des Moines, was killed by a fall of slate on the morning of July 6, 1903. Mr. Parker was in his room at the juncture of the fifth south and main entries. When slate fell on him he was standing on the front of the car. The roof had been examined that morning and was considered safe. Charles Moore, pit boss, was near him at the time when he was caught by the falling slate and helped carry him out. A doctor was called and an ambulance secured, and he was taken to his home at 1925 North Washington street. The piece of slate which fell on him was about seven feet long, three feet wide, and would average about nine inches in thickness.

**GUS CARLSON.**

Gus Carlson, a miner, in the employ of the Saylor Coal Company, was instantly killed in room 10 on the eighth east, on the north side of the Saylor Coal Company's mine, at about 4:30 P. M., July 23, 1903. He was found dead about eighteen feet from the face of his room and directly across his roadway. His limbs were broken and badly crushed by flying coal caused from a shot, evidently fired by himself. There was no fall of slate or any other material about him. He, in company with C. C. Rice and William Wiley, had been firing shots. Each had fired one shot, and Wiley and Rice, not knowing that Carlson intended firing another, had walked out of the entry. At about 6:30 P. M. it was learned that he had been killed, evidently by a second shot fired after Rice and Wiley had gone out.

**WILLIAM THOMAS.**

William Thomas, a miner, in the employ of the Colfax Consolidated Coal Company, of Colfax, Jasper county, was killed by a fall of slate in mine No. 6, on the 27th day of August, 1903. His left leg was broken above the ankle and the right leg between the knee and ankle, while on his left side three ribs were broken loose from the breast bone and crushed in. He was about seventy years of age. A shot had been put in the entry; the entry was low and he had been warned by R. M. Jones that it was in a dangerous condition. He (Thomas) sounded it and said it was all right, and just then it fell and caught him. The piece that struck him was a feather edge and was not large; would weigh perhaps, two hundred pounds. The accident happened about 10:30 A. M., August 27, 1903, and he died two hours later.

## CHARLES HOLMES.

Charles Holmes, a miner, in the employ of the Maple Grove Coal Company, was killed in mine No. 2 of the above company on November 7, 1903. He was at work in his room at the time and was struck by a fall of coal, which dislocated one hip and injured him internally, from which injuries he died at 7:15 of the same day. He was a practical miner, and had been in the employ of the Maple Grove Coal Company for four years.

## ANDREW ANDERSON.

Andrew Anderson, a miner employed by the W. D. Johnson Coal company of Boone county, Iowa, was instantly killed by a section of roof falling on him while he was engaged at work in his room in the above mine. The accident resulting in his death occurred at 10 o'clock on the morning of November 17, 1903. He was sixty years of age, a practical miner and had been in the employ of the above company for eighteen years.

## GEORGE SMITH.

On December 11, 1903, at 10 A. M., George Smith, superintendent of the Pleasant Valley Coal company, mine No. 3, at Coalville, Webster county, Iowa, was instantly killed by falling into the sump at the bottom of the shaft, which was full of hot water at the time. He was burned from the waist down. The accident was due entirely to his own work. He had caused the exhaust pipe from the steam pump to be turned into the sump, which heated the water to a boiling heat. This also caused steam on the entry and rendered it impossible to see the sump. In that condition he did not know he was so close to the shaft and accidentally walked into the sump.

## ERNEST FOREMAN.

On October 20, 1903, Earnest Foreman, a mule driver, in the employ of the Gibson Coal and Mining Company, No. 4 mine, was fatally injured on the main entry, about 1,500 feet from the main shaft. The accident happened about 9 A. M., and injury consisted in the outer part of the backbone being crushed about one inch in width. This accident was caused by falling slate, and at the time was not thought to be fatal and was so reported to this office; but later Mr. Foreman succumbed to his injuries, dying on November 19, 1903.

## JOSEPH SMITH.

Joseph Smith was fatally injured at the Norwood Coal Mine on April 27, 1904, at about 10:45 A. M., by a fall of slate. The accident happened twenty feet inside of the last break through on the third west entry, south side. His back was broken, and he also received other internal injuries. He was immediately removed to the hospital, but succumbed to his injuries a few days later. It is presumed the injured person went to look for work and went below without the knowledge of any one in charge. The company shot examiners go to work about 10:30 A. M., and had called for a cage and injured person got on with them, and started around the mine in search of mine foreman. The injured man was not in the employ of the company.

## HOYT DUNSKIN.

Hoyt Dunskin, a driver, employed by the Saylor Coal Company, was fatally injured at 11:20 A. M., on the morning of December 29, 1903. Mr. Dunskin was coming out of the first east entry on the south side with a loaded trip of cars, and in some unknown way he fell under the trip and was instantly killed. This happened opposite room twelve. There was no one present at the time of his death. He was killed on a grade, and the supposition is, that tail chain came unhooked and that he attempted to recouple while cars were in motion. He was found under his trip by dayman. His back was broken and he was internally injured.

## HARRY GIBSON.

Harry Gibson, a shotfirer, in the employ of the Colfax Consolidated Coal Company, mine No. 6, Colfax, Iowa, was instantly killed while performing his duties as shotfirer in mine No. 6, between the hours 4 and 6 P. M., June 28, 1904. When accident occurred he was in the first plug entry from the fifth west, about twenty or twenty-five feet from the first plug entry. His death was caused by flying coal from a shot in a break-through near the face of plug entry off fifth west. He had evidently lighted a few shots on the inside entry, and expected to have time to go from there to the outside plug entry and light that shot and get out before the break-through shot would go off, but it seems there was not time enough for him to make the run back and the shot must have caught him while in there. The left side of his head was crushed, arms broken and many bruises and cuts covering the body, so that death must have resulted instantly.

## JAMES CROWE.

On July 22, 1904, James Crowe, vice-president and superintendent of the Heaps & Crowe Coal company of Boone, Iowa, was found dead in the sump of the main shaft. He had evidently been caught in some unknown manner between the cage and the side of the shaft and dragged from the bottom to the ground landing; from there his body dropped back into the sump, a distance of 225 feet, where it was found two or three hours later. Coroner J. C. Walker was summoned and decided that an inquest before a jury was unnecessary, as death was caused in a purely accidental manner, and that no blame attached to anyone connected with the mine. Mr. Crowe was one of the well known coal operators of Boone county.

## ED STUART.

Ed Stuart, a driver in the employ of the Saylor Coal company, was instantly killed in the mine of the above company on September 7, 1904, by a loaded car passing over him. Mr. Stuart was employed at the mine as a regular mule driver and was coming out of the first east entry on the south side of the mine with a trip of cars at about 3 o'clock on above date when the accident occurred. It can not be determined by what means Mr. Stuart came to be under the cars, as no one witnessed the accident, but it is evident he was killed instantly, as the first car passed over his body, breaking his back and crushing him internally. He was found under the front of the second car a few minutes after the accident occurred by D. W. Roberts, who was coming out of the entry.

## ADAM WAITKUM.

Adam Waitkum, a miner in the employ of the Smith-Low Coal Company of Carbondale, Iowa, was fatally injured by a fall of slate which occurred on the afternoon of February 6, 1905. He was in room 2, third north entry, when fall of slate occurred, crushing him internally. The accident occurred in mine No. 4. Mr. Waitkum had been in the employ of the company about four months.

## THOMAS HAMMOND.

On February 2, 1905, a fatal accident occurred to Thos. Hammond, a mule driver in the employ of the Elko Coal and Mining Company of Des Moines, Iowa. Mr. Hammond was on the top of a hill coming out to the shaft bottom with a loaded trip of cars, when he was evidently kicked by the mule under the loaded cars. His leg was broken and he was hurt internally. The cause of the accident is only known by his own statement, which was that the mule kicked him. Accident happened February 2, 1905, at 3:30 P. M., and he died two days later. He was twenty-seven years old, and had been in the employ of the company for eight weeks.

## JOHN BACON.

John Bacon was fatally injured in the mine of the Oak Park Fuel Company of Des Moines, Iowa, on January 18, 1905. Mr. Bacon was working with his father in the first east entry on the above date, and while in the act of pouring powder from a keg into a coffee pot that was being utilized for a powder can, it is supposed that a spark fell from his lamp, which ignited a full keg of powder, burning him severely, both externally and internally. He was at once removed to the hospital where he died twenty-four hours later.

## HENRY CONNACK.

Henry Connack, a miner in the employ of the Bennett Bros. Coal company of Des Moines, Iowa, was fatally injured at 9:30 A. M. on January 18, 1905, by a fall of slate in above mine. He was in the first south entry, forty-five or fifty feet from the face, when a fall of slate occurred, crushing him internally, from which injuries he died two days later. Timbermen were at work timbering up place six or eight feet from where slate fell when the accident occurred. He was twenty-six years old and had been in the employ of the company about three months.

## SAMUEL TAYLOR.

Samuel Taylor, a miner, in the employ of the West Riverside Coal Company, was killed in this mine on the 17th of January, 1905. While in the act of mining off a shot in the face of his room, a piece of draw slate, weighing about one ton, fell on him, crushing him to the floor and injuring him internally, from which injuries he died the following day. Mr. Taylor was warned to stay from under the slate, but it seems he was indifferent to the danger, receiving injuries as above stated.

**L. A. BROWN.**

L. A. Brown, a miner in the employ of the Diamond Joe Coal Company of Runnells, Iowa, was instantly killed at 11 A. M. November 17, 1904. He was in room 7, inside of fourth east entry on main north when fall of slate occurred. The fall of slate was caused by two unknown slips in the roof coming together in a V shape. He was taken from under the slate by H. H. Innis, J. B. Williams and H. H. Davis, fellow miners. It took them fifteen or twenty minutes to remove slate from off of body as the slate would weigh between two and three tons. Mr. Brown was but seventeen years old. He had been in the employ of the company for three years.

**PETER JOHNSON.**

Peter Johnson, a miner in the employ of the Smith-Lowe Coal company of Carbondale, Iowa, was fatally injured in mine No. 3 of said company on the morning of November 30, 1904. He was at work in room 2, off of room 19, sixth east entry, when fall of slate occurred, crushing him around chest and shoulders. After he was taken from under the slate he was able to walk to the street car and return to his home, but died from his injuries two days later. He was an old experienced miner and had been in the employ of the company for three and one-half years.

**WILLIAM LAIDLER.**

William Laidler, a miner, in the employ of the Ditchburn Coal Company of Angus, Iowa, was fatally injured in the mine of the above company about 3:30 P. M. October 6, 1904, from which injuries he died two days later. He was drawing a pillar. The roof had made one fall and had broken off. He holed through the pillar and left a stump. As cars were plentiful that afternoon he thought he could get a car or two off the stump, and in so doing a chunk of draw slate fell on him, breaking his back and injuring him about the head and face. He was an old time experienced mine.

**JOHN W. LOGAN.**

John W. Logan, a miner in the employ of the Saylor Coal Company was fatally injured at said mine on the afternoon of October 12, 1904. Accident occurred in room 3, ninth east north entry. He was undermining his shot when coal fell on him crushing his skull. He was found a few minutes later by Robert Heathcote, Luke Wilfan and Frank Wilfan. He was not dead when taken from under the coal, but died in about three minutes after being removed.

**FOLLOWING IS THE LIST OF NON-FATAL ACCIDENTS WHICH  
OCCURRED IN THE THIRD DISTRICT OF IOWA FOR THE  
TWO YEARS ENDING JUNE 30, 1905.**

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July 9, 1903, John Wilding, arm broken coupling cars at Colfax, Consolidated Coal Company, Colfax, Jasper county.

July 22, 1903, J. T. Jones, timberman, finger cut off by ax while timbering at Colfax, Consolidated Coal Company, Jasper county.

July 28, 1903, George Ewing, driver, internally injured by fall of slate at Crooked Creek Mine No. 4, Webster county.

September 28, 1903, Joseph Birmingham, laborer, skull broken by fall of slate at Saylor coal mine, Polk county.

September 29, 1903, Thomas Colgon, miner, hip bruised and ribs broken by fall of slate at Hanlon coal mine, Scott county.

October, 1903, J. R. Anderson, miner, ankle broken by fall of slate at Enterprise mine, Polk county.

November 11, 1903, William Underwood, miner, collar bone broken and ankle dislocated by fall of slate in mine of the Goodwin Coal Company, Grand Junction, Greene county.

November 17, 1903, H. F. Scott, miner, back hurt by fall of slate at Colfax, Consolidated Coal Company's mine, Jasper county.

November 21, 1903, John Killion, timberman, foot fractured by fall of slate in mine of Boone County Coal Company.

November 21, 1903, Andrew Johnson, miner, leg broken by fall of slate at Boone County Coal Company, Boone County.

December 8, 1903, George Newcomb, miner, finger pinched off riding extras at mine of Colfax Consolidated Coal Company.

January 14, 1904, Mark Jones, miner, bone of leg fractured by fall of slate at mine of Des Moines Coal Company, Polk county.

January 18, 1904, B. H. McCarty, timberman, hip broken by fall of timber at mine of Des Moines Coal Company, Polk county.

January 20, 1904, John Birmingham, miner, leg broken by fall of slate in the W. D. Johnson mine, Boone county.

January 21, 1904, Fred Norwood, pit foreman, back dislocated and mashed through hips by fall of slate at Norwood mine, Polk county.

February 4, 1904, W. J. Jackson, driver, two fingers mashed off by car in West Riverside mine, Polk county.

February 13, 1904, George Cook, miner, rib broken by fall of slate in Smith-Lowe mine, Carbondale, Polk county.

February 25, 1904, David Scott, miner, leg broken by fall of slate in Smith-Lowe mine, Carbondale, Polk county.

Winter 1903-4, T. B. Smith, miner, leg broken by fall of slate in mine of Enterprise Coal Company, Polk county.

March 19, 1904, Malone, miner, shoulder and ribs fractured by fall of coal at mine of Des Moines Coal Company, Polk county.

April 27, 1904, Roy Mercer, miner, crushed about hips by cars at mine of Des Moines Coal Company, Polk county.

May 10, 1904, Charles Lundeen, roadman, leg broken by fall of rock at mine of Rogers Coal Company, Boone county.

June 28, 1904, Guy Stover, miner, one bone broken in left foot at mine of Colfax Consolidated Coal Company, Colfax, Jasper county.

July 8, 1904, Dave Budie, cager, arm broken by cage at mine of Colfax Consolidated Coal Company, Colfax, Jasper county.

July 23, 1904, E. H. Ballard, miner, arm broken by fall of slate in mine of Greenbrier Coal Company, Jamaica, Guthrie county.

July 25, 1904, John Sullivan, driver, thighs bruised by falling timbers in mine of Saylor Coal Company, Polk county.

September 3, 1904, George Wisham, driver, leg broken by fall of slate in mine of Smith-Lowe Coal Company, Polk county.

September 8, 1904, George Rupe, miner, badly bruised back and legs by fall of slate in mine of Coaldale Fuel Company, Polk county.

September 19, 1904, H. DeVan, driver, arm broken by car running off track at mine of Smith-Lowe Coal Company, Polk county.

September 21, 1904, John Cotton, miner, leg broken by fall of slate in mine of Center Coal Company, Polk county.

September 23, 1904, John Heffron, miner, two ribs broken by being caught between top of car and collar overhead in mine of Coaldale Fuel Company, Polk county.

October 31, 1904, Ed Cocomnut, miner and shotfirer, leg broken by flying coal, mine of Enterprise Coal Company, Polk county.

December 1, 1904, Albert Davis, miner, leg broken by fall of slate in mine of Albert Davis, Pilot Mound, Boone county.

December 3, 1904, Joe Bostoletti, miner, bone of foot broken by fall of slate, Colfax Consolidated Coal Company, Jasper county.

December 5, 1904, Albert Grandquist, driver, back dislocated and four ribs broken, caught between cars and timber, Colfax Consolidated Coal Company, Colfax, Jasper county.

December 6, 1904, Joe Lilly, miner, badly burned about face and back by powder explosion in mine of the Maple Block Coal Company, Polk county.

January 21, 1905, Peter Frisk, miner, leg broken by fall of slate in mine of the Glenwood Coal Company, Polk county.

January 23, 1905, Charles Evans, shotfirer, cut about head, got lost in room after lighting shot. Enterprise Coal Company.

January 24, 1905, M. V. Carpenter, miner, back slightly hurt by fall of slate in mine of Smith-Lowe Coal Company, Polk county.

February 15, 1905, W. Robinson, driver, ear partly kicked off by mule in mine of Norwood Coal Company, Polk county.

February 17, 1905, Jasper Kinney, miner, both legs and three ribs broken by flying coal from explosion in mine of the Keystone Coal Company, Polk county.

February 23, 1905, John Peterson, miner, two ribs and one ankle broken by fall of slate in mine of Madison Coal Company, Polk county.

February 25, 1905, A. Trevethon, miner, four ribs broken by fall of slate in Colfax Consolidated Coal Company's mine, Colfax.

March 2, 1905, N. E. Setz, miner, thumb taken off at first joint by fall of slate, Colfax Consolidated Coal Company, Jasper county.

March 4, 1905, Aug. Storchewich, miner, two fingers taken off in sheave wheel, Colfax Consolidated Coal Company, Jasper county.

March 8, 1905, Charles Krohn, driver and timberman, back dislocated and hurt about lungs and kidneys, fall of slate, Colfax Consolidated Coal Company, Colfax, Jasper county.

March 10, 1905, John R. Owens, timberman, squeezed through hips and back by fall of slate, Des Moines Coal Company, Polk county.

April 12, 1905, Jim Watkins, miner, hip dislocated by fall of slate in mine of Enterprise Coal Company, Polk county.

April 27, 1905, J. B. Bird, miner, two ribs broken by fall of slate at mine of Des Moines Coal Company.

May 2, 1905, Peter Axuer, timberman, back dislocated by fall of slate in mine of Enterprise Coal Company, Polk county.

May 2, 1905, Dominac Bimbi, miner, wrist broken by car breaking loose in mine of Saylor Coal Company.

May 21, 1905, Emmet Ward, miner, leg broken by fall of slate in mine of Norwood Coal Company, Polk county.

May 22, 1905, William Murray, driver, strained back and hips, was caught between mule and car in mine of Des Moines Coal Company.

May 25, 1905, John Ford, miner, back injured by fall of slate in mine of Coaldale Fuel Company, Polk county.

May 27, 1905, Wm. Turner, shotfirer and shot examiner, arm broken by flying coal while firing shots at mine of Saylor Coal Company, Polk county.

May 29, 1905, Jacob Walters, miner, both legs and one rib broken by falling coal at mine of Center Coal Mining Company, Polk county.

June 3, 1905, H. E. Hathaway, miner, arm broken by fall of slate in mine of Oak Park Fuel Company, Polk county.

June 28, 1905, Angelo Biondi, miner, four ribs broken by fall of slate at mine of Saylor Coal Company, Polk county.

June 29, 1905, Robert Holmes, miner, Bruised through hips and shoulders by fall of slate at mine of Colfax Consolidated Coal Company, Colfax, Jasper county.

June, 1905, Jacob Watter, miner, leg and ribs broken by falling coal at mine of Center Coal Mining Company, Polk county.



**Thirteenth Biennial Report**

**OF THE**

**Commissioners of Pharmacy**

**FOR THE**

**STATE OF IOWA.**

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**1905.**

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**PRINTED BY ORDER OF THE GENERAL ASSEMBLY.**

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**DES MOINES.**  
**B. MURPHY, STATE PRINTER.**  
**1905.**



## Letter of Transmittal.

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DES MOINES, IOWA, Sept. 1, 1905.

*To His Excellency, Albert B. Cummins, Governor:*

SIR—We herewith submit to you the Thirteenth Biennial Report of the Commissioners of Pharmacy for the State of Iowa for the official biennial period ending July 1, 1905.

FRED RUSSELL,  
BERT F. KELTZ,  
J. S. GOSS,  
*Commissioners.*

CHARLES W. PHILLIPS,  
*Secretary.*



## TREASURER'S REPORT.

From April 23, 1903, to April 23, 1904, of the Commissioners of Pharmacy  
for the State of Iowa, Charles W. Phillips, treasurer.

### RECEIPTS.

Cash on hand April 24, 1903.....	\$ 8,000.00
479 Changes of location at 50 cents .....	289.50
172 Delinquent renewals at \$1.00.....	172.00
25 Duplicate certificates at \$1.00.....	25.00
10 Certificates at \$2.00.....	20.00
243 Examinations at \$5.00.....	1,215.00
233 Graduates at \$2.00.....	466.00
4,018 Renewals at \$1.00.....	4,018.00
206 Licenses at \$100.00.....	20,600.00
<b>Total.....</b>	<b>\$ 29,740.50</b>

### DISBURSEMENTS.

1903.

C. W. Phillips, salary .....	\$ 1,225.00
N. T. Hendrix, per diem.....	1,560.00
Fred Russell, per diem.....	1,560.00
Fletcher Howard, per diem.....	1,560.00
July 1st, C. W. Phillips, expense account .....	86.65
August 3d, C. W. Phillips, expense account.....	7.83
Fletcher Howard, expense account.....	45.78
Fred Russell, expense account.....	107.18
N. T. Hendrix, expense account.....	189.54
Long Bros., printing.....	9.00
October 2d, W. F. Giesseman.....	26.25
October 12th, Fletcher Howard, expense account.....	116.47
Robert Pike, office labor.....	40.00
November 5th, N. T. Hendrix, expense account.....	71.99
Robert Pike, office labor.....	20.00
Fred Russell, expense account.....	77.91

1904.

January 2d, C. W. Phillips, expense account.....	49.17
January 14th, Sadie Norris, office labor.....	15.00
January 23d, R. L. Polk & Co., directory.....	3.00
January 29th, W. F. Giesseman, certificates.....	18.00
February 1st, N. T. Hendrix, expense account .....	56.51
Fred Russell, expense account.....	86.83
Fletcher Howard, expense account.....	4.55
February 4th, Wiley Phillips, office labor.....	20.00
February 6th, C. W. Phillips, expense account.....	28.50
April 23d, Fletcher Howard, expense account.....	22.98
Fred Russell, expense account.....	86.42
N. T. Hendrix, expense account.....	208.26
C. W. Phillips, expense account.....	2.85
W. F. Giesseman, certificates.....	9.75
Long Bros., printing.....	80.00
G. S. Gilbertson, treasurer.....	18,700.00
<b>Total.....</b>	<b>\$ 25,946.41</b>
License fund on hand.....	2,800.00
Fee amount on hand.....	994.09
<b>Total.....</b>	<b>\$ 3,794.09</b>

## TREASURER'S REPORT

From April 24, 1904, to July 1, 1904.

## RECEIPTS.

License fund on hand April 24th .....	\$ 2,800.00
Fee account on hand April 24th .....	294.09
65 Changes of location at 50 cents. ....	32.50
34 Delinquent renewals at \$1.00 .....	34.00
62 Licenses at \$100.00 .....	6,300.00
55 Graduates at \$2.00 .....	110.00
34 Examinations at \$5.00 .....	170.00
Total .....	\$ 10,840.59

## DISBURSEMENTS.

O. W. Phillips, salary .....	\$ 250.00
O. W. Phillips, expense account .....	19.87
Fred Russell, per diem .....	290.00
Fred Russell, expense account .....	75.27
B. F. Keltz, per diem .....	290.00
B. F. Keltz, expense account .....	97.24
Fletcher Howard, per diem .....	290.00
Fletcher Howard, expense account .....	7.90
W. F. Giesseman, office expenses .....	18.25
G. S. Gilbertson, treasurer .....	9,007.56
Total .....	\$ 10,840.59

## PHARMACY COMMISSION.

## RECEIPTS AND DISBURSEMENTS

From July 1, 1904, to July 1, 1905.

## RECEIPTS.

294 Licenses at \$100.....	\$ 24,900.00	
157 Graduates at \$2.00.....	814.00	
247 Examinations at \$4.00.....	1,286.00	
3 Certificates at \$2.00 ..	6.00	
18 Duplicate certificates at \$1.00.....	18.00	
4,071 Renewals at \$1.00.....	4,071.00	
128 Delinquent renewals at \$1.00.....	128.00	
407 Changes of location at 50 cents.....	203.50	
Total.....		\$ 80,870.50

## DISBURSEMENTS.

Paid G. S. Gilbertson, treasurer—

August 1, 1904.....	\$ 1,115.50	
August 31, 1904.....	1,481.50	
October 14, 1904 ..	814.50	
November 15, 1904.....	1,581.50	
December 15, 1904.....	1,417.00	
January 14th, 1905.....	1,852.00	
February 15, 1905.....	2,519.50	
March 15, 1905.....	2,582.50	
April 15, 1905 .....	2,645.00	
May 15, 1905.....	3,282.50	
June 15, 1905.....	3,742.50	
July 15, 1905 .....	3,874.50	
Total .....		\$ 80,870.50

## OFFICIAL RULES OF THE COMMISSIONERS OF PHARMACY.

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The following rules have been adopted by the commission in accordance with the authority of Code, section 2584, as amended by the Twenty-Seventh General Assembly, 1898:

**RULE 1.** For the purpose of facilitating the enforcement of the pharmacy law, the state has been districted, and the counties assigned to each of the commissioners are as follows:

*To Commissioner Fred Russell, Rockwell City.*—Lyons, Osceola, Dickinson, Emmet, Kossuth, Palo Alto, Humboldt, Winnebago, Hancock, Sioux, O'Brien, Clay, Pocahontas, Buena Vista, Cherokee, Plymouth, Woodbury, Ida, Sac, Calhoun, Monona, Harrison, Shelby, Audubon, Guthrie, Dallas, Boone, Webster, Greene, Crawford, Carroll.

*To Commissioner Bert F. Keltz, Webster City.*—Worth, Mitchell, Howard, Winneshiek, Allamakee, Cerro Gordo, Floyd, Chickasaw, Fayette, Clayton, Wright, Franklin, Butler, Bremer, Hamilton, Hardin, Grundy, Black Hawk, Buchanan, Delaware, Dubuque, Story, Marshall, Tama, Benton, Linn, Jones, Jackson, Polk, Jasper, Poweshiek, Iowa, Johnson, Cedar, Clinton, Scott.

*To Commissioner J. S. Goss, Atlantic.*—Muscatine, Washington, Keokuk, Mahaska, Marion, Warren, Madison, Adair, Cass, Pottawattamie, Mills, Montgomery, Adams, Union, Clarke, Lucas, Monroe, Wapello, Jefferson, Henry, Des Moines, Lee, Van Buren, Davis, Appanoose, Wayne, Decatur, Ringgold, Taylor, Page, Fremont, Louisa.

All complaints of violation of the pharmacy law should be referred to the commissioner in whose district they occur.

**RULE 2.** All examinations in pharmacy will be held in the office of the pharmacy commission, at the capitol building, in the city of Des Moines, on the first Tuesday of February, April, June, August, October, and December, excepting when such day occurs on a legal holiday or a day usually observed as a holiday, when such examination will be held on the Thursday following.

**RULE 3.** All applications for examination shall be made upon blank forms which will be furnished by the secretary of the commission on request.

**RULE 4.** All applicants for examination must be 21 years of age, of good moral character, able to speak, read and write the English language, and

possessed of sufficient general education. Such applicant must have pursued the study of pharmacy for two full years in actual apprenticeship with a registered pharmacist in a drug store, or must be a graduate of a recognized medical school, who has been engaged for three years last past in the actual and active practice of medicine. But the time actually spent in a recognized school of pharmacy, not exceeding one year, shall be allowed as a credit on above time. Applicants are required to correctly answer 75 per cent of the questions submitted by the commission on examination.

**RULE 5.** Persons over 18 and under 21 years of age, possessing the other qualifications provided in rule 4, may be registered as assistant pharmacists and will receive certificates accordingly, and when the holder attains his majority, said certificate may be exchanged upon application for a certificate of full registration.

**RULE 6.** Graduates of pharmacy schools desiring registration will make application upon blanks to be furnished by the commission, accompanied by their diploma, and shall furnish such proof regarding the course of study pursued therein as may be required by the commission.

**RULE 7.** In all cases where registered pharmacists have two certificates of registration, the last certificate issued will supersede the former, and renewals will be required on the last one only.

**RULE 8.** Examinations shall be conducted in writing, and the applicant shall be allowed no assistance of any kind, verbal or oral, therein. Any applicant violating this rule and receiving aid in his examination may be summoned by the commissioners and required to submit to a new examination. Should the person so summoned refuse or neglect to obey the order of the commission, or should he appear from such second examination to be incompetent and not possessed of the requisite knowledge and skill, the commissioners will cancel his certificate and strike his name from the register. In like manner they will cancel the certificates of all persons who have secured registry by fraud or false representation.

**RULE 9.** Whenever application is made to the commission to revoke certificates of registration for violation of any of the laws governing registered pharmacists, the prosecution shall present and file with the secretary of this board a duly certified transcript of the final judgment of conviction, identifying the guilty party by giving the number of his or her certificate of registration. Upon the filing of the application for revocation, with the transcript aforesaid, the commission shall fix a time for the hearing thereof, and shall cause written notice of said complaint to be served upon the accused at least ten days prior to the time fixed for such hearing. Said notice shall in general terms inform the accused of the nature of the charge against him, and of the time when and of the place where the same will be heard. The accused may, on or before the day set for the hearing, show cause why his certificate should not be revoked.

**RULE 10.** Licenses issued to itinerant vendors of drugs, nostrums, ointments, "or appliances of any kind for the treatment of disease or injury," by this commission, under the provisions of section 2594 of the code, can be transferred by the owner thereof sending the same to the secretary of the commission, who shall record the transfer and make the endorsement upon the license, and the transferee shall be entitled to use the same for the unexpired portion of the term.

**RULE 11.** All pharmacists are forbidden to sell any bitters, cordials, elixirs, wines, etc., put up in the form of proprietary medicines, where the same can be used as an intoxicant, unless the pharmacist holds a permit authorizing him to sell intoxicating liquors, and sale must be made then only in the same manner as any other intoxicating liquor, by requiring the purchaser to apply in writing thereof upon the regular form.

FRED RUSSELL,  
BERT F. KELTZ,  
J. S. GOSS,  
*Commissioners.*

## NOTICE TO PHARMACISTS.

For the guidance and information of pharmacists throughout the state, the commissioners desire to call attention to some of the important provisions of the statute.

*First.*—That none but registered pharmacists can conduct a drug store or pharmacy; they must be the principals and managers of the store in *all its management*, neither can they allow any one not registered to sell medicines or poisons, or dispense physicians' prescriptions, except under their direct supervision. (See supreme court decision, *State v. Norton*, 67 Iowa, page 641.)

*Second.*—Sales of medicines and poisons can only be made by a proprietor, principal or clerk who is a registered pharmacist, and who is required to keep a record of all poisons sold, included in schedule A of section 2593 of the code.

*Third.*—The certificates of all registered pharmacists must be conspicuously posted in the place of business or pharmacy which they are conducting, or in which they are employed, with the renewal certificate placed in the lower left hand corner, and change of locality certificate (if they have changed their locality) in lower right hand corner of each certificate, to show to the public that their certificate of registration is in full force and effect.

*Fourth.*—All registered pharmacists when they change their locality are required to notify the secretary of the commission, and have their change of locality recorded, otherwise they are liable to a fine for each month's delinquency, and when so delinquent their certificates are not in full force and effect.

*Fifth.*—A registered pharmacist's certificate is regarded "in full force and effect," when he holds a renewal of his certificate from March 22d to March 22d of the current year, and change of locality certificate if he has changed his location, unless subsequently forfeited and revoked.

*Sixth.*—Annual renewals are not required or issued for the first part of a year preceding the 22d day of March; the pharmacist's certificate of registration is evidence that it is in full force and effect from the date of its issuance to the following 22d of March; however, the certified statement up to date of the secretary of the commission of pharmacy, under official seal of said commission, is regarded the best legal evidence as to whether a person is registered or not.

*Seventh.*—Registered pharmacists are exempt from jury duty. (See section 333, code of 1897.)

*Eighth.*—The code, section 2593, regulating the sale of poisons, is applicable to all patent preparations and non-secret preparations containing poisons enumerated in schedules "A" and "B."

It is unlawful for any person except a registered pharmacist to sell such preparations for any purpose whatever.

*Ninth.*—The sale of homeopathic medicines, except such as the law denominates "proprietary medicines," properly comes under the regulations of the pharmacy law, and all proprietary medicines containing poisons can be sold only by registered pharmacists as provided by the pharmacy law. The sale, therefore, of any quantity of poison or poisonous preparations enumerated in section 2593 of the code, or of proprietary medicines containing such poisons, can only be made by registered pharmacists. In our opinion, a technical construction is warranted in the sale of a single bottle of these remedies (except as provided in section 2593), for notwithstanding the contents of an entire bottle proved harmless, the purchase and use of several bottles of the same might be fatal.

*Tenth.*—It is impossible to keep a correct alphabetical list of names of the pharmacists of the state because of the constant change made in the list; we therefore earnestly request all registered pharmacists when corresponding with the commission to give the number of their certificates as well as their names.

FRED RUSSELL,  
BERT F. KELTZ,  
J. S. GOSS,  
*Commissioners.*

[Code of 1887, as amended by Twenty-seventh General Assembly, 1898.]

## CHAPTER 6.

### TO REGULATE THE KEEPING AND SALE OF INTOXICATING LIQUORS BY REGISTERED PHARMACISTS.

SEC. 2385. *Permits.*—Persons holding permits may sell and dispense intoxicating liquors, not including malt liquors for pharmaceutical and medicinal purposes, and to permit holders for use and resale by them, only for the purpose authorized in this chapter; they may also sell and dispense alcohol for specified chemical and mechanical purposes, and wine for sacramental uses. Registered pharmacists, physicians holding certificates from the state board of medical examiners, and manufacturers of proprietary medicines may buy from permit holders intoxicating liquors (not including malt) for the purposes of compounding medicines, tinctures and extracts that can not be used as a beverage; but nothing herein contained shall be construed to authorize the manufacture or sale of any preparation or compound, under any name, form or device, which may be used as a beverage, and which is intoxicating in its character.

SEC. 2386. *Pharmacists—manufacturers of proprietary medicines.*—If any such registered pharmacist or manufacturer of proprietary medicines shall sell, barter, give, exchange dispose of or use intoxicating liquors in any manner or for any purpose other than authorized in the preceding section, he shall be liable to all the penalties and proceedings provided for in this chapter, and upon proof of such violation by a registered pharmacist, the clerk of the district or superior court shall transmit to the commissioners of pharmacy a certified copy of the record thereof within ten days after its entry, and upon receipt of such certified copy said commissioners may strike his name from the list of registered pharmacists and cancel his certificate. The commissioners of pharmacy are empowered to make such further rules and regulations, not inconsistent with law, with respect to the purchase, keeping and use of intoxicating liquors by registered pharmacists and manufacturers of proprietary medicines, as they shall think proper to prevent the abuses of the privilege, and shall revoke the certificate of registration of any pharmacist for repeated violations of this chapter. Said commissioners are authorized to draw from the state treasury an amount not exceeding 50 per cent of the clear proceeds of all fees collected and paid into the treasury of any county on account of violations of the provisions of this chapter or the chapter regulating the practice of pharmacy, prosecuted by the commissioners, the amount so drawn to be used solely in prosecutions instituted by them for failure to comply with the provisions of such chapters. The court or clerk thereof, before whom any prosecution is instituted or prosecuted by

the commissioners of pharmacy, shall certify to the auditor of state all such cases, and the amount of fees imposed and collected therein. The expenses thus incurred by the commission shall be audited by the executive council, and the amount thereof shall be drawn from time to time upon the warrants of the state auditor.

SEC. 2387. *Application for permit.*—All applications for a permit to sell intoxicating liquors for the purposes allowed in this chapter shall be by petition, signed and sworn to by the applicant, and filed in the office of the clerk of the district or superior court of the county or city in which the buying and selling is to be carried on, at least ten days before the term at which the matter is to be for trial, which petition shall set out the name of the applicant, his residence and business and that for the two previous years, the place, particularly describing it, where the business is to be conducted, that he is a citizen of the United States and of this state, that he is a registered pharmacist, that now and for the six months last past he has been lawfully conducting a pharmacy in the township, town or city wherein he proposes to engage in the business under the permit applied for; that he has not been adjudged guilty of any violation of the law relating to intoxicating liquors within the two years next preceeding the making of this application, is not the keeper of a hotel, eating house, saloon, restaurant or place of public amusement, and that he is not addicted to the use of intoxicating liquors as a beverage, and desires a permit to buy, keep and sell liquors for lawful purposes only. If the applicant has previously held a permit which has been revoked, his petition, in addition to the foregoing requirements, shall state that he has not, within the last two years next before making the application, knowingly been engaged, employed or interested in the unlawful manufacture, sale or keeping with intent to sell of intoxicating liquors.

SEC. 2388. *Notice.*—Notice of an application for a permit must be published once each week for three consecutive weeks in a newspaper regularly published and printed in the English language, and of general circulation in the township, town or city where the applicant proposes to conduct the business, or if none be regularly published therein, then in one of the papers selected by the board of supervisors for the publication of its proceedings, the last publication of which shall be not less than ten nor more than twenty days before the first day of the term at which the hearing is to be had. This notice shall state the name of the applicant, with the firm name, if any, under which he is doing business, the purpose of the application, the particular location of the place where the proposed business is to be carried on, and that the required petition is or will be on file in the clerk's office of the court (naming it) at least ten days before the first day of the term (naming it) when the application will be made. A copy of such notice shall be served upon the county attorney in the same manner and for the same length of time as is required of original notices in said courts.

SEC. 2389. *Hearing—remonstrances.*—Upon the return day of the notice, the court having, from an inspection of the record, ascertained that due and timely service thereof has been made, shall, if no remonstrance has been or is offered to be filed, unless for cause postponed to some other day in the

term, proceed to hear and try the application. Any remonstrance against or objection to the granting of the permit must be in writing and filed in the clerk's office by noon of the first day of the term, unless further time be given, and shall be so filed before the date fixed for the trial. Such remonstrance or objections may be made by any citizen of the county wherein the application is made, specifically stating the reasons therefor, and the court shall fix a day in the term of the trial, and all applications shall be tried at the first term after completed service has been made of the required notice, if the business of the court shall allow. No permit shall be granted unless the court shall find from competent evidence that all the averments in the petition are true, that the reasonable convenience and necessities of the people, considering the population and all the surroundings, make the granting of the permit proper, and that the applicant is possessed of the character and qualifications required, worthy of the trust to be reposed in him, and likely to discharge the same with fidelity. The county attorney shall appear in such cases, and any number of persons, not less than five, filing any remonstrance or objection, may also appear by counsel and resist the application. If more than one permit is applied for in the same locality, the applications shall be heard at the same time, unless for cause shown it be otherwise ordered. If for any reason the application can not be tried in the term time, the same may be heard by the judge in vacation, at a time to be fixed by the court and made of record, and in all applications for permits the court may grant or refuse any or all applications, as will best subserve the public good.

SEC. 2390. *Bond*.—No permit shall issue until the applicant shall execute to the state a bond in the penal sum of \$1,000, with good and sufficient sureties to be approved by the clerk of the court, conditioned that he will well and truly observe and obey the laws of the state now and hereafter in force in relation to the sale of intoxicating liquors, that he will pay all fines, penalties, damages and costs that may be assessed or recovered against him for a violation of such laws during the time for which the permit is granted, and the principal and sureties in said bond shall be liable thereon, jointly and severally, for all civil damages and costs that may be recovered against the principal in any action brought by a wife, child, parent, guardian, employer or person under the provisions of this chapter. The bond, after being approved and recorded by the clerk, shall be deposited with the county auditor, and suit may be brought thereon at any time by the county attorney, or by any person for whose benefit the same is given. The clear proceeds of all other money which may be collected for breaches of the bond shall go to the school fund of the county. If at any time the sureties on the bond shall file with the court or clerk a written request for release, or become insolvent, or be deemed insufficient by the court granting the permit, or its clerk, such court or clerk shall require a new bond to be executed within a reasonable time to be fixed. If the permit holder fails or neglects to furnish a new bond within the time so fixed the permit shall from that date become null and void.

SEC. 2391. *Oath of applicant.*—in addition to giving the bond required, the applicant shall take and subscribe the following oath, which shall be indorsed upon the bond: "I, .....do solemnly swear (or affirm) that I will well and truly perform all and singular the conditions of the within bond, and keep and perform the trust confided in me to purchase, keep and sell intoxicating liquors. I will not sell, give or furnish to any person any intoxicating liquors otherwise than as provided by law, and especially I will not sell or furnish any intoxicating liquors to any person who is not known to me personally, or duly identified, nor to any minor, intoxicated person, or persons who are in the habit of becoming intoxicated; and I will make true, full and accurate returns of all certificates and requests made to or received by me as required by law; and said returns shall show every sale and delivery of such liquors made by me, or for me, during the months embraced therein, and the true signature to every request received and granted; and such returns shall show all the intoxicating liquors sold or delivered to any and every person, as returned."

SEC. 2392. *Permit issued.*—Upon taking said oath and filing said bond, the clerk of the court granting the same shall issue a permit to the applicant, authorizing him to keep and sell intoxicating liquors as in this chapter provided. The permit so issued shall specify the building, give the street and number or location in which intoxicating liquors may be sold by virtue of the same, and the length of time the same shall be in force, unless sooner revoked. *Provided*, that upon the lease or destruction of the building where such business is conducted, or for other good and sufficient cause shown, consent in writing of the bondsmen having been obtained thereof, or a new bond given, the district court of the county which granted said permit, or a judge of said court, may change the place specified in said permit to some other place in the same city or township, upon motion thereof. A copy of said motion, and notice of the time when and the place where the same shall be heard, shall be given to the county attorney of the county where said place is situated at least five days before said hearing.

SEC. 2393. *Record—costs*—The clerk of the court granting the permit shall preserve, as part of the record and files in his office, all petitions, and other papers except bonds pertaining to the granting or revocation of permits, and keep suitable books in which bonds and permits shall be recorded. The books shall be furnished by the county like other public records. Whether said permit be granted or refused, the applicant shall pay the costs incurred in the case, and when granted he shall make payment before any permit issue, except the court may tax the cost of any witnesses summoned by private persons resisting said application, and the fees for serving such subpoenas, to such persons, when it is shown that such witnesses were summoned maliciously or without probable cause to believe their evidence material. The fees in such cases shall be as provided in actions at law in the district court.

**SEC. 2394. *Requests to purchase.***—Before selling or delivering any intoxicating liquors to any person, a request must be signed by the applicant, in his true name, truly dated, stating the applicant is not a minor, his residence, for whom and whose use the liquor is required, and his true name and residence, and, where numbered, by street and number if in a city, the amount and kind required, the actual purpose for which the request is made and for what use desired, and that neither the applicant nor the person for whose use requested habitually uses intoxicating liquors as a beverage, and attested by the permit holder who receives and fills the request. The request shall be refused unless the permit holder has reason to believe the statement to be true, and in no case granted unless the permit holder filling it personally knows the person applying is not a minor, intoxicated, nor in the habit of using intoxicating liquors as a beverage; or if the applicant is not so personally known, before filing the order or delivering the liquor, he shall require identification, and the statement in writing of a reliable and trustworthy person, of good character and habits, known personally to him, that the applicant is not a minor, nor in the habit of using intoxicating liquors as a beverage, and is worthy of credit as to the truthfulness of the statements in the application; and this statement so made shall be signed by the witness in his own name, stating his residence correctly.

**SEC. 2395. *Penalties.***—If any person shall make any false or fictitious signature, or sign any name other than his own to any paper required to be signed, or make any false statement in any paper or application signed to procure liquors, the person so offending shall be punished by a fine of not less than \$20 nor more than \$100 and costs of prosecution, and shall be committed until said fine and costs are paid, or shall be imprisoned not less than ten nor more than thirty days. If any permit holder or his clerk shall make false oath touching any matter required to be sworn to, the person so offending shall be punished as provided by law for perjury. If any person holding a permit under this chapter shall purchase or procure any intoxicating liquor otherwise than as herein authorized, or make any false return to the county auditor, or use any request for liquors for more than one sale, he shall be guilty of a misdemeanor and punished accordingly.

**SEC. 2396. *Transportation by permit holder.***—Every permit holder is hereby authorized to ship to registered pharmacists and manufacturers of proprietary medicines intoxicating liquors to be used by them for the purposes authorized by law. All railway, transportation and express companies and other common carriers are authorized to receive and transport the same upon presentation of a certificate from the clerk of the district or superior court of the county where the permit holder resides, that such person is permitted to ship intoxicating liquors under the law of this state.

**SEC. 2397. *Returns by permit holder.***—On or before the 15th day of January, March, May, July, September and November of each year each permit holder shall make full returns to the county auditor under oath, of all requests filled by him and his clerks during the two preceding months, which oath shall be in the following form: "I....., being duly sworn, on oath state that the requests for liquors herewith returned are all that were received and filled at my pharmacy (or place of business) during the months of ..... A. D.....; that I have carefully preserved the same, and that they were filled up, signed and attested at the

date shown hereon, as provided by law; that said requests were filled by delivering the quantity and kinds of liquors required, and that no liquors have been sold or dispensed under color of my permit during said months except as shown by the requests herewith returned, and that I have faithfully observed and complied with the conditions of my bond and oath taken by me thereon indorsed, and with the laws relating to any duties in the premises."

SEC. 2398. *Account of purchase and sales.*—Every permit holder shall keep strict account of all liquors purchased or procured by him in a book kept for that purpose, which shall be subject at all times to the inspection of the commissioners of pharmacy, the county attorney any grand juror, sheriff or justice of the peace of the county, and such book shall show of whom such liquors were purchased or procured, the amount and kind, the date of receipt and amount sold; also the amount on hand of each kind for each two months, and at the same time he returns requests to the county auditor he shall file a statement of such account with such auditor, except that the items of sales need not be embraced therein, but the aggregate amount of each kind shall be verified. All forms necessary to carry out the provisions of this chapter not otherwise provided for shall be as may be provided by the commissioners of pharmacy.

SEC. 2399. *Illegal sales by permit holder—evidence.*—Every permit holder or his clerk shall be subject to all the penalties, forfeitures and judgments, and may be prosecuted by all the proceedings and actions criminal and civil, whether at law or in equity, provided for or authorized by this chapter and the permit shall not shield any person who abuses the trust imposed by it or violates the law. In case of conviction in any proceeding, civil or criminal, the liquors in possession of the permit holder shall by order of the court be destroyed, and on the trial of an action or proceeding against any person for manufacturing, selling, giving away or keeping with intent to sell intoxicating liquors in violation of law, or for any failure to comply with the conditions or duties imposed by law, the requests for liquors and returns made to the auditor, the quantity and kinds of liquors sold or kept, purchased or disposed of, the purpose for which liquors were obtained by or from him and for which they were used, the character and habits of sobriety or otherwise of the purchasers, shall be competent evidence, and may be considered, so far as applicable to the particular case, with any other recognized, competent and material facts and circumstances bearing on the issues involved in determining the ultimate facts. In any suit, prosecution or proceeding under this chapter the court shall compel the production in evidence of any books or papers required to be kept, and shall compel any permit holder, his clerk, or any person who has purchased liquors of either of them, to appear and give evidence, but such oral evidence shall not be used against such person or witness on the trial of any criminal proceeding against him.

SEC. 2400. *REVOCATION OF PERMIT.*—Permits shall be deemed trusts reposed in the recipients, and may be revoked upon sufficient showing by order of a court of judge. Complaint may be presented at any time to the district or superior court, or a judge thereof, which shall be in writing and signed and sworn to by three citizens of the county in which the permit was granted. A copy of the complaint shall, with a notice in writing of the time

and place of hearing, be served on the accused five days before the hearing, and if the complaint is sufficient, and the accused appear and deny the same, the court or judge shall proceed without delay, unless continued for cause, to hear and determine the controversy. If continued or appealed at the instance of the permit holder, his permit may, in the discretion of the court, be suspended pending the controversy. The complainant and accused may be heard in person or by council, or both, and proofs may be offered by the parties; and if it shall appear upon such hearing that the accused has in any way abused the trust, or that liquors are sold by the accused or his employes in violation of law, or dispensed unlawfully, or he has in any proceeding, civil or criminal, within the last two years, been adjudged guilty of violating any of the provisions of this chapter, the court or judge shall revoke and set aside the permit; the papers and order in such case shall be immediately returned to and filed by the clerk of the court, and, if heard by a judge, the order shall be entered of record as if made in court; and if in this or any other proceeding, civil or criminal, it shall be adjudged by the court or judge that any registered pharmacist, proprietor, or clerk, has been guilty of violation and provision of this chapter, such adjudication may be by the commissioners of pharmacy regarded as sufficient, if repeated, to work a forfeiture of his certificate of registration. It shall be the duty of the clerk to forward to the commissioners of pharmacy transcripts of such judgments or orders without charge therefor, and as soon as practicable after final judgment or order has been made and entered.

SEC. 2401. *How business conducted—clerks—physicians.*—A permit holder may employ not more than two registered pharmacists as clerks to sell intoxicating liquors in conformity to the permit and the law; but in such cases the acts of clerks in conducting the business shall be considered the acts of the permit holder, who shall be liable therefor as if he had personally done them, and in making returns, the verification of such requests as may have been received, attested and filed by the clerk must be made by such clerk, and the clerk who transacted any of the business under the permit must join in the general oath required of the employer, so far as relates to his own connection therewith. If for any cause a registered pharmacist who holds a permit shall cease to hold a valid and subsisting certificate of registration or renewal thereof, his permit shall be forfeited and be null and void. Nothing contained in this chapter shall be construed to prevent licensed physicians from in good faith dispensing liquors as medicines to patients actually sick and under their treatment. In case a permit holder shall die, his personal or legal representative may continue the business, subject to the provisions thereof, through the agency of any reputable registered pharmacist, upon the approval of the court granting such permit, or the clerk thereof, and the giving of a bond as hereinbefore provided. A partner who is a registered pharmacist, not holding a permit, shall have the same rights and be subject to the same restrictions as clerks, and for whose acts the permit holder shall be held responsible the same in all respects as for his clerks.

SEC. 2402. *Intoxication punished.*—If any person shall be found in a state of intoxication he is guilty of a misdemeanor, and any peace officer shall, without a warrant, take him into custody and detain him in some suitable place until an information can be made before a magistrate, and a warrant of arrest issued; under which he shall at once be taken before the magistrate issuing the same, or, if for any reason he cannot act, to the next nearest one, where he shall be tried, and, if found guilty, shall be fined in the sum of not less \$5 nor more than \$25 and costs of prosecution, or imprisonment in the county jail not more than thirty days, the penalty, or any portion of it, may be remitted by a magistrate before whom the trial is had, and the accused discharged from custody upon his giving information in writing and under oath, stating when, where and of whom he purchased or received the liquor which produced the intoxication, and the kind and character of this liquor, and, in addition, giving bail for his appearance before any court to give evidence in any action or complaint to be commenced or preferred against such party for furnishing the same.

SEC. 2403. *Selling or giving to minors or intoxicated person or persons in the habit of becoming intoxicated.*—No person by himself, agent or otherwise, shall in any manner procure for, or shall sell or give any intoxicating liquors to any minor for any purpose, except upon written order of his parent, guardian or family physician, or give to or in any manner procure or sell the same to any intoxicated person, or one in the habit of becoming intoxicated. Any person violating the provisions of this section shall forfeit and pay the sum of \$100 00 for each offense, to be collected by action against him; or, if a permit holder, against him and the sureties on his bond. Such action may be brought by any citizen of the county. One-half of the amount so collected shall go to the informer and one-half to the school fund of the county.

SEC. 2432. *Payment of mulct tax.*—Any permit holder selling intoxicating liquors as a beverage shall pay the tax provided for in this section.

## CHAPTER 18.

## OF PRACTICE OF PHARMACY.

SECTION 2584. *Commissioners—powers.*—The commission of pharmacy shall consist of three competent pharmacists who have been for the preceding five years residents of the state and engaged in practicing pharmacy, one of whom shall be annually appointed by the governor and hold office for three years and until his successor is appointed and qualified. The commission shall have power to make all needed regulations for its government and for the proper discharge of its duties under this chapter, the same to be done without expense to the state, save the necessary blanks and stationery, which shall upon requisition, be furnished by the secretary of state, and make such other regulations not inconsistent with law and as authorized in this code, respecting the purchase, keeping and use of intoxicating liquors by registered pharmacists not permit holders, as may be required for the prevention or abuse of the trust reposed in them, and such other matters as may be hereinafter specially enumerated.

SEC. 2585. *Secretary and treasurer.*—The commission of pharmacy shall annually, on the first Monday in May, elect a suitable person, who shall not be a member of said board, and who shall be known as secretary and treasurer; said secretary and treasurer shall enter upon the discharge of his duties as soon as he shall have filed with the secretary of state a good and sufficient bond in the penal sum of \$3,000, signed by at least two sureties, who shall justify in the aggregate to double the amount of the said bond, and which shall bear upon its face the approval of the governor. The salary of said secretary and treasurer shall not exceed \$1,500 per annum.

SEC. 2586. *License fees.*—The secretary and treasurer shall keep in his office a book known as the "commissioners of pharmacy license fee book," which shall be made with ruled columns and printed headings, showing the date, the name of the person paying, and the amount of each license and fee paid, in which he shall enter all fees for licenses received by him, and on the first Monday of each month he shall file with the auditor of state a true statement thereof for the previous month, properly sworn to by him, and shall quarterly pay into the state treasury, on the first day of January, April, July and October of each year, the amount of license fees payable by law into such treasury.

SEC. 2587. *Records—compensation.*—The books, accounts, vouchers and funds belonging to or kept by said board of pharmacy shall at all times be open or subject to the inspection of the governor, or any committee appointed by him. Each commissioner of pharmacy shall receive as full compensation for his services the sum of \$5 for each day actually employed

in the discharge of his official duties, together with his actual traveling expenses in performing said duties, all of which shall be paid from the fees of the office, and each commissioner shall file with the auditor of state, at the end of each quarter of his official year, an itemized statement under oath of his actual time in days employed in the discharge of his duty and traveling expenses incurred in the performance of his duty for such quarter.

SEC. 2588. *Registered Pharmacists.*—No person not a registered pharmacist shall conduct the business of selling at retail, compounding or dispensing drugs, medicines, or poisons, or chemicals for medical use, or compounding or dispensing physicians' prescriptions as a pharmacist, nor to allow anyone who is not a registered pharmacist to so sell, compound or dispense such drugs, medicines, poisons or chemicals, or physicians' prescriptions; except such as are assistants to and under the supervision of one who is a registered pharmacist, and physicians who dispense their own prescriptions only; but no one shall be prohibited by anything contained in this chapter from keeping and selling proprietary medicines and such other domestic medicines as do not contain intoxicating liquors or poisons, nor from selling concentrated lye or potash having written or printed on the package or parcel its true name and the word "poison," sales of which need not be registered. Whoever violates either provision of this section, for the former shall pay \$5 for each day of its violation, to be recovered in an action in the name of the state, brought by the county attorney under the direction of the commission, and for the latter shall be guilty of a misdemeanor, and punished accordingly. In actions or prosecutions under this chapter, it need not be proven that the defendant has not a pharmacist's certificate, but such fact shall be a matter of defense.

SEC. 2589. *Examinations—registration.*—The commission, at such times and places as it may select, and in such manner as it may determine upon, shall examine all persons desiring to engage in and conduct business as registered pharmacists, as contemplated in the preceding section, and, if found competent, the applicant's name shall be entered in the registry book of certificate holders. ("Graduates of pharmacy holding a diploma from the State University, or from any school or college of pharmacy requiring a course of study and laboratory work equivalent to that prescribed by the said State University in its catalogue for the year 1897-98, may be registered without examination") (Pharmacists thus registered have the sole right to keep and sell all medicines and poisons except intoxicating liquors.)

SEC. 2590. *Registration and examination fees.*—Each person furnished a certificate and registered without examination shall pay to the commission \$2, and each and every person whom they examine orally, or whose answers to a schedule of questions are returned subscribed under oath, the sum of \$5, which shall be in full for all services. And in case the examination of said person shall prove defective and unsatisfactory, and the name not be registered, he shall be permitted to present himself for re-examination within any period not exceeding twelve months next thereafter, and no charge shall be made for re-examination. The said commissioners are authorized to administer oaths pertaining to their said office and take and certify the acknowledgments of instruments in writing. After registration, an annual fee of \$1 for a renewal certificate shall be paid on or before the 22d day of March by all pharmacists who continue in business, and the conduct of such business without such renewal shall be a misdemeanor.

SEC. 2591. *Registry book—certificate displayed.*—The commission shall keep a registry book in which shall be recorded the names and places of residence of all certificate holders, with the date of such certificate, which shall hold good for one year, and no longer without renewal. Renewals shall be granted upon the payment of the annual fee fixed in the preceding section. Should a certificate holder change his residence, upon notice thereof such change shall be noted in the registry book. Each certificate holder shall keep displayed in his place of business his registration certificate. A failure to comply with this requirement shall be a misdemeanor.

SEC. 2592. *Sale of adulterated drugs.*—Registered pharmacists shall be responsible for the quality of all drugs, chemicals and medicines which they may sell or dispense, except those sold in the original packages of the manufacturer, and those known as patent medicines. If any such pharmacist shall knowingly adulterate or cause to be adulterated any drugs, chemicals or medical preparations by him kept for sale or sold, he shall be guilty of a misdemeanor.

SEC. 2593. *Sale of poisons.*—No person shall sell at retail any poisons enumerated in schedules A and B, except in dispensing poisons in usual quantities or doses upon the prescription of a physician, as follows: Schedule A, arsenic and its preparations, corrosive sublimate, white precipitate, red precipitate, biniodide of mercury, cyanide of potassium, hydro cyanic acid, strychnia and other poisonous vegetable alkaloids and their salts, essential oil of bitter almonds, opium and its preparations except paregoric and other preparations of opium containing less than two grains to the ounce. Schedule B, aconite, belladonna, colchicum, conium, nux vomica, henbane, savin, ergot, cotton root, cantharides, creosote, digitalis, and the pharmaceutical preparations, croton oil, chloroform, chloral hydrate, sulphate of zinc, mineral acids, carbolic acid and oxalic acid; unless the package containing such poisons has placed thereon, and also the outside wrapper or cover, the name of the article, the word "poison," and the name and place of business of the seller; nor sell or deliver such poison unless upon due inquiry it be found that the party receiving it is aware of its character and represents it to be used for proper purposes; nor sell or deliver any of the poisons included in schedule A without also, before delivery of the same, causing an entry to be made in a book kept for that purpose, of the date of sale, the name and address of the purchaser, the name of the poison, the purpose for which it was represented to be required, and the name of the dispenser, which book shall be open for inspection by the proper authorities and preserved for at least five years, the entry of each such sale to be signed by the dispenser. Any person violating any of the provisions of this section, except as otherwise provided by law, shall be adjudged guilty of a misdemeanor and be punished by a fine of not less than \$25 nor more than \$100, or by imprisonment in the county jail for not less than thirty days nor more than sixty days, or by both fine and imprisonment, in the discretion of the court.

SEC. 2594. *Itinerant vendors of drugs.*—Any itinerant vendor of any drug, nostrum, ointment, or appliance of any kind for the treatment of any disease or injury, and all those who by any method publicly profess to treat or cure diseases, injury, or deformity, shall pay to the treasurer of the commission of pharmacy an annual fee of \$100, upon the receipt of which the

secretary of the commission shall issue a license for one year from its date; \$2,000 annually of the money arising from the license fund, or so much as may be needed, shall be devoted to defraying the expenses of the commission, and any balance remaining shall be paid into the state treasury. Said commission shall, on the first day of January of each year, make a verified and itemized statement in writing to the auditor of state, of all receipts and expenditures of money coming into their hands by virtue of their office. Any violation of this section shall be a misdemeanor, and any person shall, upon conviction thereof, pay a fine of not less than \$100, nor more than \$200. In actions or prosecutions under this chapter, it need not be proven that the defendant has not a license, but such fact shall be a matter of defense.

SEC. 2595. *Penalties for false representation.*—If any person shall procure or attempt to procure a certificate of registry for himself or another by means of false representations or device, or without being a registered pharmacist shall conduct a place for retailing, compounding or dispensing drugs, medicines or chemicals, or for compounding or dispensing physicians' prescriptions, or shall use or exhibit the title of registered pharmacist, and each several day a place shall be so used shall be held as a separate and several offense.

SEC. 2596. *Revocation of certificate.*—When a registered pharmacist has been convicted of a violation of the provisions of this chapter, in addition to the other penalties provided by law, the commission, in its discretion, may revoke his certificate of registry.

ACT RELATING TO THE SALE OF COCAINE AND PROVIDING  
PUNISHMENT FOR ILLEGAL SALE THEREOF.

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AMENDATORY OF CHAPTER 18 RELATING TO PRACTICE OF PHARMACY.

*Be it Enacted by the General Assembly of the State of Iowa:*

SECTION 1. No one, by himself, clerk, employe or agent, shall either directly or indirectly, sell or give away any cocaine, or preparation containing cocaine, except on the written prescription of a registered physician for medical purposes, and no such prescription shall be refilled except on the written order of a physician. However, nothing in this act shall be construed to prevent the sale thereof to a wholesale or retail dealer in drugs nor a registered physician, or licensed dentist for use in the practice of his profession.

SEC. 2. Any one found guilty of violating the provisions of section one, of this act, for the first offense, shall pay a fine of not less than twenty-five dollars, and not more than one hundred dollars and costs of prosecution. For the second offense and each subsequent offense, he shall pay on conviction thereof, a fine of not less than one hundred dollars, and not more than three hundred dollars, or imprisonment in the county jail not to exceed three months. Any clerk, employee or agent, violating or aiding in the violation of section one, shall be charged and convicted as principal.

SEC. 3. Peace officers shall see that the provisions of this act are faithfully executed within their respective jurisdictions, and when they are informed or have reasons to believe that this act has been violated, and the proof thereof can be had, they shall file information to that effect against the offending party before a magistrate, who thereupon shall proceed according to law. The county attorney shall prosecute the violators of this act.

SEC. 4. This act, being deemed of immediate importance, shall take effect and be in force, after its publication in the *Iowa State Register* and the *Des Moines Leader*, newspapers.

Approved March 22.

Published, March 25, 1902.



## CERTIFICATE.

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IOWA COMMISSIONERS OF PHARMACY. }  
OFFICE OF THE SECRETARY, }  
STATE CAPITOL, DES MOINES, IOWA. }

I, Charles W. Phillips, Secretary of the Commissioners of Pharmacy for the State of Iowa, hereby certify that the foregoing abstract of the state pharmacy register is copied from the original register on file in this office, and that the same is true and correct.

In testimony whereof, I have hereunto set my hand and affixed the seal of the commission this 1st day of September, A. D. 1905.

CHARLES W. PHILLIPS,  
*Secretary of the Commission.*

## ABSTRACT OF STATE PHARMACY REGISTER.

Showing Certificate Now in Force.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
121	Arts, David.....	June 14, 1880	As owner.....	Donnellson.....	Red Oak.	
232	Anderson, A. A.....	June 23, 1880	As assistant.....	Boone.....		
583	Arnold, C. V.....	June 15, 1880	As owner.....	Mt. Pleasant.....		
1208	Avers, W. L.....	June 15, 1880	As owner.....	Sheldon.....		
1294	Agnew, David G.....	June 18, 1880	As owner.....	Wilton Junction.....		
1667	Axt, Julius H.....	July 23, 1880	By examination.....	Fort Madison.....	Fort Madison.	
1861	Alexander, E. H.....	October 5, 1880	By examination.....	Oakalocoe.....	Kalona.	Kansas City, Mo.
2051	Allen, B. F.....	April 27, 1881	By examination.....	Wellman.....	Ruthven.	
2200	Anderson, E.....	October 12, 1881	By examination.....	Manson.....		
2241	Alexander, W. A.....	September 10, 1881	By examination.....	Leon.....		
2479	Arthur, Charles H.....	May 8, 1882	By examination.....	Webster City.....		Grand Jo., Col.
2505	Adams, Charles R.....	August 1, 1882	By examination.....	Cedar Rapids.....		
2581	Alexander, T. R.....	February 17, 1883	By examination.....	Marion.....		
2805	Adair, Charles R.....	April 17, 1883	By examination.....	Logan.....	Des Moines.	
2862	Adams, John R.....	July 17, 1883	By examination.....	De Soto.....	Vinton.	
2788	Alexander, D. E.....	March 6, 1884	By examination.....	Des Moines.....		
3396	Arnold, R. R.....	April 15, 1884	By examination.....	Humeston.....	Manchester.	
3429	Anders, F. W.....	June 15, 1886	By examination.....	Earville.....		
3129	Aabury, T. P.....	February 23, 1887	By examination.....	Tingley.....		Coon Rapids.
3146	Anderson, Aug.....	March 1, 1887	By examination.....	Carroll.....		
3811	Aborn, F. J.....	April 5, 1887	By examination.....	Sheffield.....		
3832	Adams, J. W.....	April 8, 1887	By examination.....	Mason City.....		
3445	Andre, T. J.....	April 17, 1888	As graduate.....	S-haller.....		
3405	Allen, S. A.....	June 5, 1888	By examination.....	Sheldon.....		Nevada, Mo.
3501	Allison, S. M.....	August 21, 1888	By examination.....	Nassau.....		
3545	Arthur, H. J.....	April 19, 1889	By examination.....	Webster City.....	Williamsburg.	
3556	Alt, George W.....	May 20, 1889	By examination.....	What Cheer.....		
3595	Amadem, George S.....	July 23, 1889	Graduate.....	Manchester.....		
3794	Anderson, O. H.....	July 7, 1890	By examination.....	Kingsley.....	Weeley.	
3902	Allen, E. D.....	January 27, 1890	Graduate.....	Mason City.....		Thornton.

3931	Ackley, F. E.	October	20, 1890	By examination.	Foster.	South Dakota.	In Missouri.
4099	Anderson, W. B.	August	17, 1891	By examination.	Sanford.	.....	Colorado.
4101	Andrew, W. B.	August	17, 1891	Graduate	Warloo.	.....	
4181	Ady, H. C.	November	8, 1891	By examination.	Himeson.	Grundy Center.	
4208	Adams, Harry B.	April	8, 1892	By examination.	Mason City.	Eagle Grove.	
4290	Acy, George W.	April	16, 1892	By examination.	Sage.	Sheldon.	
4331	Allen, C. G.	April	16, 1892	By examination.	Neosho.	Grand River.	
4381	Allen, Charles E.	April	4, 1893	By examination.	Neosho.	Marcus.	
4483	Ames, William C.	April	4, 1893	Graduate	Aurora.	Garnet.	
4589	Ames, William C.	December	8, 1893	By examination.	Sanborn.	.....	
4544	Alger, Oland	November	14, 1893	By examination.	Oreston.	Monticello.	
4569	Aldrich, Ed. A.	January	15, 1894	By examination.	Bellevue.	.....	
4587	Ablers, Oswald U.	February	6, 1894	By examination.	Thor.	Creston.	
4594	Atzen, Charles B.	March	5, 1894	By examination.	Hartley.	.....	
4671	Atkinson, George H.	June	5, 1894	By examination.	Hull.	Maquoketa.	
4700	Avery, A. M.	July	30, 1891	By examination.	Manchester.	Moville.	
4710	Anderson, C. E.	August	14, 1894	By examination.	Lester.	Hartford, S. D.	
4719	Abbott, Welcomes A.	August	24, 1894	By examination.	Jefferson.	Des Moines.	
4729	Amesberry, A. L.	August	24, 1894	By examination.	Marshalltown.	Oskaloosa.	
4748	Ayres, Charles J. yrus	December	8, 1894	By examination.	Marshalltown.	Fort Dodge.	
4793	Aldrich, Frank S.	March	12, 1894	By examination.	Marshalltown.	.....	
4837	Ackert, Harry J.	April	2, 1894	By examination.	Katherville.	.....	
4866	Armour, Frank C.	April	2, 1894	By examination.	Cedar Rapids.	.....	
4884	Armstrong, O. C.	May	7, 1895	Graduate	Hubbard.	.....	
4933	Armstrong, E. F.	September	1, 1895	By examination.	Griswold.	.....	
4937	Albery, William F.	October	1, 1895	By examination.	Greeley.	.....	
4938	Arnsmith, P. A.	October	8, 1895	By examination.	Ruthven.	.....	
4943	Armstrong, T. B.	November	6, 1895	By examination.	Ellston.	.....	
4958	Armstrong, J. H.	December	4, 1895	By examination.	Sioux City.	Marshalltown.	
4975	Armstrong, A. C.	January	7, 1896	By examination.	Rhodes.	.....	
4987	Armstrong, Carl	February	7, 1896	By examination.	Grinnell.	Newburg, Oregon.	
5039	Alexander, J. M.	April	7, 1896	By examination.	Hubbard.	Omaha, Nebraska.	
5112	Alley, C. E.	July	7, 1896	By examination.	Council Bluffs.	Algona.	
5115	Albertson, Wm. C. H.	October	13, 1894	By examination.	Spencer.	.....	
5137	Anderson, O. H.	September	1, 1896	By examination.	Sheffield.	.....	
5143	Adams, H. C.	September	4, 1894	By examination.	Pella.	Montana.	
5209	Aborn, Fred C.	March	2, 1897	By examination.	Ridgeway.	Thompson.	
5249	Allen, Will L.	April	6, 1897	By examination.	Conrad.	Larabee.	
5256	Allen, R. E.	March	6, 1897	By examination.	Beres.	.....	
5330	Alexander, Henry	October	6, 1897	By examination.	Tingley.	Albia.	
5398	Adams, Everett H.	December	7, 1897	By examination.	Elston.	Wallingford.	
5390	Asbury, J. W.	February	7, 1898	By examination.	Ottumwa.	Emerson, Nebraska.	
5403	Armstrong, Dale D.	March	1, 1898	By examination.	Seymour.	Lindsay, Nebraska.	
5443	Adams, Clyde E.	April	6, 1898	By examination.	Clarion.	.....	
5472	Armstrong, E. C.	April	6, 1898	By examination.	Hancock.	.....	
5477	Armstrong, Henry J.	April	6, 1898	By examination.	Sioux City.	.....	
5479	Anderson, C. E.	June	7, 1898	By examination.	Des Moines.	.....	
5534	Armour, H. O.	August	8, 1898	Graduate	Richland.	.....	
5534	Anderson, C. V.	August	8, 1898	Graduate	Emmettsburg.	.....	
5600	Anderson, C. V.	September	7, 1898	By examination.	.....	.....	Kansas.
5693	Anderson, L. R.	November	7, 1898	By examination.	.....	.....	What Cheer.
5644	Ankema, S. E.	March	7, 1899	By examination.	.....	.....	

Kansas.

What Cheer.

## ABSTRACT—CONTINUED.

Number of Certificate	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5618	Adam, W. C.	March 7, 1899	By examination	Elma		In Washington.
5619	Anderson, A. G.	March 7, 1899	Graduate	Redfield.		
5620	Alford, George W.	May 17, 1899	Graduate	Souix City	Homer, Neb.	
5621	Allen, D. A.	June 6, 1899	Graduate	Des Moines	Denver, Colo.	
5614	Anderson, Henry C.	August 18, 1899	By examination	Clear Lake	Ventura	
5626	Armstrong, Archie W.	September 5, 1899	Graduate	Council Bluffs	Dwight, Ill.	
5628	Austin, Silas E.	December 6, 1899	Graduate	Allison	Ogden.	
5631	Anderson, Swan.	December 6, 1899	By examination	Boone	Lansing.	
5634	Acherman, Jacob O.	March 6, 1900	Graduate	Des Moines	Washita.	
5632	Adams, Hicks L.	March 6, 1900	By examination	Fontanelle	Ft. Dodge.	
6153	Anderson, Wm. J.	September 4, 1900	By examination	Dayton		
6179	Archer, Merrill D.	December 4, 1900	Graduate	Des Moines		In Michigan.
6197	Anderson, Samuel O.	December 4, 1900	By examination	Mason City		
6201	Armer, Victor E.	January 1, 1901	Graduate	Des Moines	Chicago, Ill.	
6246	Agasen, Carl A.	January 1, 1901	Graduate	St. Ansgar	Coulter.	
6222	Abbott, Fred C.	February 2, 1901	By examination	Oelwein		
6239	Anderson, R. E.	April 2, 1901	By examination	Council Bluffs.		
6314	Aukema, Mark W.	June 4, 1901	Graduate	Cylinder.		
6423	Abel, W. W.	September 4, 1901	By examination	Emerson.		
6424	Allen, Bessie M.	September 3, 1901	By examination	Crawfordsville	Muscantine.	
6431	Angerssen, John G.	September 3, 1901	By examination	St. Ansgar	Bonaparte.	
6435	Anderson, Joseph.	October 1, 1901	By examination	Shenandoah	Clarinda.	
6475	Assmus, Frank E.	November 11, 1901	By examination	Independence	Ryan.	
6471	Ackley, Norman G.	December 3, 1901	By examination	Manchester	Floyd.	
6371	Armour, Geo. E.	January 6, 1902	Graduate	Pedar Rapids	Alta.	
6322	Anderson, Oscar	January 6, 1902	Graduate	Four Corners	Albia.	
6342	Apland, Thos. A.	January 7, 1902	By examination	Kalo.		
6345	Alizon, Harry E.	January 4, 1902	By examination	Garden Grove.	Oaccola.	
6347	Alton, Arthur J.	February 1, 1902	By examination	Grinnell	Alterton.	
6347	Albertson, Eugene W.	April 1, 1902	By examination	Inwood	Sheldon.	
6361	Adette, E. C. H.	June 3, 1902	Graduate	Council Bluffs.		
6794	Alexander, R. B.	August 3, 1902	By examination	Knox	Centerville.	
6795	Allen, Hart M.	August 3, 1902	By examination	What Cheer.		
6812	Allen, Ralph I.	September 21, 1902	Graduate	Souix City		
6891	Armstrong, Fred J.	October 10, 1902	Graduate	Souix City		
6492	Armstrong, Fred J.	September 7, 1902	By examination	Carroll	Kansas City, Mo.	
6481	Anderson, J. B.	September 7, 1902	By examination	Des Moines	Ruthven.	
6481					Rappay.	

6877	Althouse, Wm.	November	5, 1902	Graduate	Cedar Rapids	Chicago, Ill.
6904	Altshick, Otto	December	2, 1902	By examination	Belleve	Portland, Ind.
6914	Alexander, J. C.	February	3, 1903	Graduate	Des Moines	
7077	Alexander, J. P.	July	3, 1903	Graduate	Creston	
7088	Aldrich, Harry E.	October	14, 1903	By examination	Dubuque	Iowa City.
7151	Amber, Henry L.	October	6, 1903	Graduate	Sheldon	Iowa City.
7152	Ankrum, Fred L.	October	6, 1903	Graduate	Des Moines	Co fax.
7187	Andrews, James	October	6, 1903	Graduate	Breda	Indiana.
7188	Antes, W. L.	October	6, 1903	By examination	Marengo	
7195	Alden, F. C.	October	6, 1903	Graduate	Dubuque	
7219	Arno, Ed. O.	November	2, 1903	Graduate	Iowa Falls	Illinois.
7235	Adams, J. E.	December	1, 1903	By examination	Havelsack	Sioux Rapids.
7244	Adams, J. A.	February	2, 1904	Graduate	Gray	Vail.
7365	Adams, E. E.	May	20, 1904	Graduate	Seranton	Blackton.
7396	Anderson, E. T.	May	20, 1904	By examination	Linn Grove	
7391	Anderson, A. O.	June	7, 1904	Graduate	Murray	Greenfield.
7451	Allison, Chas. H.	August	2, 1904	Graduate	Davenport	
7432	Arnold, Ed. S. Jr.	August	2, 1904	Graduate	Waterloo	
7526	Alyea, W. S.	October	4, 1904	Graduate	Adel	
7545	Artin, A. S.	December	6, 1904	Graduate	Corning	Nebraska.
7554	Adams, Geo. W.	December	6, 1904	By examination	Des Moines	Tabor.
7560	Adams, F. L.	December	6, 1904	Graduate	Ottumwa	Vail.
7561	Ayers, Otto E. W.	February	7, 1905	Graduate	Des Moines	
7562	Anderson, H. W.	February	7, 1905	Graduate	Independence	Waverly.
7568	Anderson, D. W.	February	7, 1905	Graduate	Waterloo	Indiana.
7615	Anderson, Chris A.	February	2, 1905	Graduate	Unionville	
7635	Allen, T. E.	April	12, 1905	Graduate	Clinton	
7701	Alban, Glen W.	July	12, 1905	By examination	Des Moines	Illinois.
7731	Altierbough, G. E.	August	1, 1905	Graduate	Des Moines	Illinois.
7746	Almone, John	August	1, 1905	Graduate	Dixon	
782	Binford, E.	June	5, 1890	As owner	Waucoma	
7855	Burnside, J. M.	June	7, 1880	As owner	Iowa City	
7856	Boerner, H. W.	June	16, 1880	As owner	Beacon	Birmingham.
3 3	Beardsley, William	June	4, 1890	As owner	Cromwell	Lorimor.
324	Bailey, A. S.	June	7, 1890	As owner	Carroll	
326	Baerger, G. F.	June	21, 1880	As assistant	Clarence	
331	Blair, W. H.	June	10, 1880	As owner	Denmark	
428	Blackinton, W. N.	June	12, 1880	As owner	Davenport	
449	Ballard, John W.	June	9, 1880	As owner	Prescott	
483	Booth, A. E.	June	24, 1880	As owner	Elkader	
517	Bayless, Frank D.	June	17, 1890	As principal	Fairfield	
576	Bredshaw, A. C. D.	June	2, 1890	As owner	Hampton	
629	Baldwin, E. V.	June	8, 1880	As owner	Colesburg	
718	Bush, John V.	June	8, 1880	As owner	Davenport	
731	Brown, E. L.	June	30, 1880	As assistant	Spirit Lake	
739	Brown, T. H.	June	30, 1880	As owner	Cedar Rapids	
741	Beech, Thomas C.	June	30, 1880	As owner	Yonon	
871	Blosser, George W.	July	4, 1880	As owner	Van Wert	Conrad Grove.
872	Belling, A. Z.	July	7, 1880	As assistant	Beman	
873	Bowman, J. K.	July	8, 1880	As owner		

Hallett, Minn.

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
955	Birney, C. C.	June 24, 1890	As owner	Nora Springs.	Mason City.	
1042	Beecher, George N.	June 7, 1890	As owner	Oskaloosa.	Garner.	
1142	Birney, Catharine	June 6, 1890	As owner	Nora Springs.		
1175	Brown, William K.	June 7, 1890	As owner	Dubuque.		
1181	Brimhall, S. M.	June 8, 1890	As owner	State Center.	Schaller.	
1182	Brimhall, C. W.	June 8, 1890	As owner	State Center.		
1232	Bishop, Edward W.	June 7, 1890	As owner	State Center.		
1254	Beach, Edward N.	June 8, 1890	As owner	Troy Mills.		
1285	Brubaker, Joseph.	June 2, 1890	As owner	Vinton.		
1324	Birney, E. E.	July 20, 1890	As owner	Floyd.		
1325	Bruce, O. M.	July 24, 1890	As owner	Walnut.		
1557	Hixby, R. J.	July 26, 1890	As owner	Edgewood.		
1538	Blanchard, Lewis.	July 18, 1890	As owner	Edgewood.	Woodward.	
1633	Brookings, D. J.	August 18, 1890	By examination	Waverly.		
1691	Broock, A. A.	August 3, 1890	As owner	Wyoming.		
1824	Babcock, E. M.	November 8, 1890	As assistant	Kinross.	Marengo.	
1830	Baughman, O. F.	November 8, 1890	By examination	Oskaloosa.		
1895	Bentley, N. J.	August 11, 1890	By examination	Fonda.	Fairbank.	
1896	Rothwell, G. W.	November 11, 1890	As owner	Bonaparte.		
1931	Blackman, B. P.	December 24, 1890	By examination	Tipton.		
1990	Brotherlin, H. L.	December 31, 1890	By examination	Holland.	Allison.	
2081	Burroughs, S. W.	April 17, 1891	By examination	Muscatine.		
2160	Berryhill, William E.	June 30, 1891	By examination	Clarinda.	Iowa City.	
2187	Burns, E. M.	August 2, 1891	By examination	Council Bluffs.	Mason City.	
2258	Brush, George W.	October 19, 1891	By examination	Trær.	Sioux Center.	
2308	Bibbins, A. L.	January 9, 1892	By examination	Marshalltown.	Bedford.	
2390	Brown, Armand	January 24, 1891	By examination	Leroy.	Letts.	
2395	Bennett, J. W.	February 25, 1892	By examination	Waverly.	Floyd.	
2406	Brittan, S. P.	April 25, 1892	By examination	Rockford.		
2441	Bosley, James E.	May 17, 1893	By examination	Marengo.	Ladora.	
2448	Berry, W. F.	May 9, 1893	By examination	New Hampton.		
2454	Babcock, J. F.	May 22, 1893	By examination	Moulton.		
2497	Sachman, E. W.	July 11, 1892	By examination	West Bend.	Estherville.	
2511	Fauer, William S.	August 6, 1892	By examination	Des Moines.	Spokane, Wash.	
2523	Brower, J. H.	September 8, 1892	By examination	Callopee.		
2531	Bielenberg, J. R.	September 14, 1892	By examination	Wheatland.	Keystone.	

3533	Byrns, J. A.	December	14, 1882	By examination.	Marshalltown.	Colfax.	Washington.
3537	Bilby, A. M.	January	16, 1883	By examination.	Harvard.	Galva.	
3538	Baron, H. S.	March	20, 1883	By examination.	Orange City.	Fella.	
3543	Branson, W. S.	June	22, 1883	By examination.	Red Oak.	Sioux City.	
3548	Depler, F. F.	November	28, 1883	By examination.	Payette.	Lake City.	
3553	Ballock, Frank H.	December	10, 1884	By examination.	Lenox.		
3558	Bennett, L. W.	December	24, 1884	By examination.	Bloomfield.		
3561	Boworth, L. M.	May	27, 1885	By examination.	Cedar Rapids.		
3569	Benke, Alfred T.	September	7, 1885	By examination.	West Union.		
3575	Bailem, B. H.	November	9, 1885	By examination.	Libon.		
3577	Baier, W. S.	February	28, 1886	By examination.	Mapleton.		
3587	Burdichan, E. H.	March	18, 1886	By examination.	Des Moines.		
3590	Bard, William G.	July	20, 1886	By examination.	Albia.		
3593	Baas, Leo F.	July	27, 1886	By examination.	Muscatine.		
3594	Barringer, Will J.	September	25, 1887	By examination.	West Union.		
3597	Batterson, J. S.	September	18, 1886	By examination.	Quasqueton.		
3598	Beck, Louis.	September	21, 1887	By examination.	Ossian.		
3604	Bartram, R. T.	December	28, 1886	By examination.	Alison.		
3610	Bauch, W. C. A.	March	25, 1887	By examination.	Vinton.		
3618	Barrall, George M.	January	25, 1887	By examination.	Iowa City.		
3620	Biddinger, J. W.	March	16, 1887	By examination.	Council Bluffs.		
3623	Blanchaine, C. H.	March	21, 1887	By examination.	Grand River.		
3625	Burbank, George W.	February	25, 1887	By examination.	Audubon.		
3651	Brubaker, C. W.	February	25, 1887	By examination.	Bancroft.		
3653	Boener, Ed. A.	February	25, 1887	By examination.	Lowa City.		
3653	Brown, Oscar H.	March	15, 1887	By examination.	Cherokee.		
3679	Bone, H. C.	March	15, 1887	By examination.	Battle Creek.		
3679	Bloom, Charles L.	April	19, 1887	By examination.	Mason City.		
3679	Berryman, A. J.	May	17, 1887	By examination.	De Witt.		
3676	Roerner, Emil L.	July	7, 1887	By examination.	Clinton.		
3692	Beckmann, E. C.	August	15, 1887	By examination.	Chariton.		
3698	Bronson, E. O.	August	15, 1887	By examination.	Postville.		
3698	Baker, Lincoln E.	September	9, 1887	By examination.	Sioux City.		
3812	Baxter, C. V.	September	6, 1887	By examination.	Colfax.		
3846	Bacon, George	November	15, 1887	By examination.	Boyd.		
3846	Briles, W. R.	January	28, 1888	By examination.	Essex.		
3848	Bayless, C. D.	March	28, 1888	By examination.	Winterset.		
3848	Blair, James E.	April	17, 1888	By examination.	Rockford.		
3847	Bossard, William E.	May	15, 1888	By examination.	Moulton.		
3853	Bliss, N. G.	July	5, 1888	By examination.	Marengo.		
3861	Brink, Milner	July	17, 1888	By examination.	Shellsburg.		
3862	Brooks, W. R.	August	10, 1888	By examination.	Kellogg.		
3854	Barlow, A. W.	August	28, 1888	By examination.			
3859	Bare, O. H.	September	4, 1888	By examination.			
3857	Brincken, Anton	September	4, 1888	By examination.			
3846	Beck, W. R.	October	16, 1888	By examination.			
3854	Bartholomew, H. H.	January	23, 1889	By examination.			
3857	Bergen, O. C.	January	14, 1889	By examination.			
3866	Birchard, Rufus	February	11, 1889	By examination.			

## ABSTRACT—CONTINUED.

Number of Cert.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
3747	Blair, C. A.	February 12, 1889	By examination.	Creston	Cherokee.	
3754	Blinn, S. W.	March 19, 1889	By examination.	Nashua.	La Porte City.	
3756	Blanchaine, H. J.	May 25, 1889	By examination.	Elkader.		
3763	Bender, G. B.	July 23, 1889	By examination.	Spencer.		
3762	Batterworth, H. O.	August 10, 1889	Graduate.	Maquoketa.		
3763	Badie, H. H.	August 11, 1889	Graduate.	Waverly.		
3764	Barns, Warren A.	August 23, 1889	By examination.	Foster.	Ottumwa.	
3765	Bain, John	October 1, 1889	By examination.	Brandon.	Linca.	
3768	Beaman, James D.	October 23, 1889	By examination.	Chariton.	Osceola.	
3773	Bellbaugh, W. R.	November 26, 1889	By examination.	Prairie Grove.		
3782	Bond, L. L.	December 16, 1889	By examination.	West Side.		
3783	Boehmer, H. E.	December 16, 1889	By examination.	Cedar Falls.	Hampton.	
3787	Boehm, Charles H.	January 21, 1890	By examination.	Mapleton.	Fochant.	
3788	Bales, D. D.	February 3, 1890	By examination.	Maxwell.	Winterset.	
3789	Brinell, W. F.	February 18, 1890	By examination.	State Center.		
3790	Brink, H. J.	March 3, 1890	By examination.	Remsen.	Doon.	
3791	Briggs, George H.	March 15, 1890	Graduate.	Nevada.		
3792	Branson, L. H.	April 15, 1890	Graduate.	West Branch.	Iowa City.	
3793	Berry, A. S.	May 4, 1890	Graduate.	Moulton.	Panama.	
3794	Brown, H. R.	May 20, 1890	By examination.	Marengo.	Oxford.	
3795	Blackman, R. E.	August 24, 1890	By examination.	Sioux City.	Des Moines.	
3796	Brown, H. F.	September 12, 1890	By examination.	Pond.	Arm-trong.	
3797	Romer, A. F.	January 8, 1891	By examination.	Rockney.	Buck Grove.	
3798	Baker, Harry A.	January 8, 1891	By examination.	Cedar Rapids.	St. Louis.	
3799	Baker, Harry A.	March 8, 1891	By examination.	Toledo.	Sioux Falls, S. D.	
3800	Boschman, William	March 8, 1891	By examination.	River-side.	Chicago, Ill.	
3801	Blaker, Theodore	March 8, 1891	By examination.	Elkader.		
3802	Blakes, Harry A.	April 8, 1891	By examination.	Siourney.	Mason City.	
3803	Barnes, Virgo A.	May 19, 1891	By examination.	Olcott.		
3804	Benson, Nita J. A.	May 19, 1891	By examination.	Spirit Lake.	Lake Park.	
3805	Benson, Nita J. A.	June 4, 1891	By examination.	Burlington.	Prarieburg.	
3806	Batterworth, A. H.	August 4, 1891	By examination.	Shelburne.	Knoxville.	
3807	Battley, Samuel F.	September 21, 1891	By examination.	Andrew.	Maquoketa.	
3808	Bartlett, Samuel F.	October 21, 1891	By examination.	Woodbine.		
3809	Bartlett, Samuel F.	November 30, 1891	By examination.	Fort Dodge.	Newell.	
3810	Bartlett, Samuel F.	December 1, 1891	By examination.	Des Moines.	Oakalosa.	
3811	Blair, Frank L.	December 1, 1891	By examination.	Clarinda.	Creston.	

In California.

			West Liberty.		In Colorado.		In Montana.		In Texas.	
4174	Barkalow, W. B.	February	2, 1892	By examination.	Atalissa					
4184	Barlow, O. J.	February	15, 1892	By examination.	Des Moines					
4187	Beer, Winfield S.	February	28, 1892	By examination.	Decorah City					
4188	Buaby, John B.	February	20, 1892	By examination.	Oskaloosa	Rose Hill.				
4205	Bolding, W. B.	March	30, 1892	By examination.	Alvord	Oakville.				
4215	Bertsch, George P.	April	5, 1892	By examination.	Sigourney	Oskaloosa.				
4235	Beady, Frank D.	May	17, 1892	By examination.	Kolfe	West Bend.				
4241	Brown, Harry L.	June	17, 1892	Graduate.	Columbus Junction.					
4251	Ellis, George W.	June	27, 1892	Graduate.	McGregor.					
4260	Braunlich, Hugo	July	2, 1892	By examination.	Davenport.	Hedrick.				
4270	Baker, George B.	August	2, 1892	By examination.	Keota.	Denver, Col.				
4281	Beauchamp, C. E.	August	2, 1891	Graduate.	Bloomfield.	Iowa Falls.				
4292	Burgess, Laura B.	August	17, 1892	By examination.	Alden					
4311	Bader, Julius A.	June	6, 1892	By examination.	Des Moines.					
4308	Barrows, C. H.	June	31, 1893	By examination.	Sloan	Blanco.				
4309	Backer, W. G.	June	81, 1893	By examination.	Gardner.	Plymouth.				
4374	Borman, W. H.	February	7, 1893	By examination.	Dubuque.	Creco.				
4355	Becker, John G.	February	22, 1893	By examination.	Sibley	Meervey.				
4382	Brooks, W. W.	March	7, 1893	By examination.	Little Rock					
4414	Bennan, Robert	March	24, 1893	By examination.	Orceon					
4444	Blair, Milton M.	May	2, 1893	By examination.	Des Moines					
4491	Blagburn, John F.	May	3, 1893	By examination.	West Union.					
4479	Burgett, Alva W.	June	24, 1893	By examination.	Decorah.	Stanley.				
4510	Brunt, I. W.	September	5, 1893	By examination.	Wyoming					
4535	Baird, T. J.	October	31, 1893	By examination.	Ottumwa	Mason City.				
4532	Burns, Charles E.	November	8, 1893	By examination.	Maquoketa.					
4516	Brown, Eugene F.	November	23, 1893	By examination.	Dunlap.	Mallard.				
4528	Barrett, W. H.	December	12, 1893	By examination.	Van Horne.					
4521	Bell, P. H.	December	19, 1893	By examination.	Adel	Rusey.				
4575	Barnett, J. W.	February	6, 1894	By examination.	Clermont	Wadena.				
4589	Rigler, Louis E.	March	8, 1894	By examination.	Moulton	Arizona.				
4633	Buck, Charles W.	April	8, 1894	By examination.	Clarion	Wallingford.				
4631	Bigley, John P.	April	10, 1894	By examination.	Grand Junction.					
4617	Bleakney, E. L.	June	6, 1894	By examination.	Missouri Valley.	Nebraska.				
4659	Brown, L. W.	June	6, 1894	By examination.	Anamosa.					
4606	Beam, Harry E.	June	8, 1894	By examination.	Kamrar.					
4608	Bohning, A. E.	August	7, 1894	By examination.	Modale.	Belmond.				
4763	Bracken, Z. E.	May	2, 1895	By examination.	Manilla					
4765	Bidlack, Joseph L.	October	12, 1894	By examination.	Morning Sun	Lanark, Ill.				
4786	Brown, J. W.	December	4, 1894	By examination.	Des Moines	Lone Tree.				
4731	Bledch, Herman F.	December	13, 1894	By examination.	Bellevue	Ledyard.				
4804	Brackner, Edward	January	2, 1895	By examination.	Des Moines	Dyersville.				
4818	Briar, John	March	12, 1895	By examination.	Maquoketa.					
4832	Broxan, A. L.	March	13, 1895	By examination.	Panora.					
4845	Buckner, William C.	March	13, 1895	By examination.	Des Moines					
4857	Bach, Charles E.	March	19, 1895	By examination.	Turilla.	Sac City.				
4890	Bundy, Earl A.	April	9, 1895	By examination.	Ramburg.					
4892	Boyer, W. M.	April	2, 1895	By examination.	Nora Springs	Mason City.				
4876	Birney, Emma H.	May	7, 1895	By examination.	Ashton	Sheldon.				
4898	Barrager, Emory L.	May	13, 1894	By examination.						

## ABSTRACT—CONTINUED.

Number of cer- tificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Ad- dress.	Remarks.
4896	Bradshaw, S. M.	June 4, 1898	By examination	George Bayard	Des Moines	
4900	Boyd, J. W.	August 18, 1898	By examination	Kingsley	Arnold's Park.	
4910	Banks, Edward P.	September 8, 1898	By examination	Alex	Eldora.	
4940	Bundy, J. A.	October 29, 1898	By examination	Davenport	McCallaburg.	
4967	Ballard, Harry W.	December 14, 1898	By examination	Dahl	Cedar Rapids.	
4983	Boyman, Ralph H.	December 31, 1898	By examination	Colesburg	California.	
4984	Bush, John A.	February 4, 1899	By examination	Creston	Wellman.	
4984	Boysen, G. H.	February 4, 1899	By examination	Cedar Falls	Monona.	
4992	Berkle, John F.	February 4, 1899	By examination	Burlington	Delhi	In S. Dakota.
5002	Bartlett, W. S.	February 4, 1899	By examination	Lenox	Northwood	
5008	Bull, A. S.	March 8, 1899	By examination	Janesville	Strawberry Point	
5045	Ballentine, W. A.	April 7, 1899	By examination	Colfax	Royal	
5079	Burns, Claude M.	April 7, 1899	By examination	Iowa City	Dubuque.	
5079	Burns, L. M.	May 5, 1899	By examination	Bellevue	Delhi	In S. Dakota.
5106	Bentham, Eugene	July 7, 1899	By examination	Rockford	St. Paul, Minn.	
5141	Brockway, S. Alcindra	September 10, 1899	By examination	Dewitt		
5175	Beck, J. Conrad	December 1, 1899	By examination	Boone		
5177	Bartz, Edward R.	December 14, 1899	By examination	Davenport		
5210	Beard, Abner R.	January 9, 1899	By examination	Iowa City		
5210	Barrett, G. N.	March 2, 1899	By examination	Conrad		
5248	Brown, J. H.	April 6, 1899	By examination	Lost Nation		
5248	Brown, Joseph W.	April 6, 1899	By examination	Northwood		
5255	Blanche, R. J.	April 6, 1899	By examination	Ruthven		
5257	Biglow Zella	May 4, 1899	By examination	Dyersville		
5290	Brown, Lewis O.	May 4, 1899	By examination	Schaller		
5290	Babcock, H. M.	June 1, 1899	By examination	Weber City		
5304	Barry, John A.	August 3, 1899	By examination	Des Moines		
5306	Brimhall, C. W.	August 3, 1899	By examination	Wauke		
5315	Brown, Will E.	August 21, 1899	Graduate	Goodell		
5317	Brunk, L. D., Jr.	August 7, 1899	By examination	Sioux City		
5399	Bundy, O. W.	September 10, 1899	By examination	Leon		
5433	Botts, G. W.	October 4, 1899	By examination	Monticello		
5451	Bell, Edgar E.	November 10, 1899	By examination			
5451	Baker, Howard S.	November 10, 1899	By examination			
5506	Baum, John W.	November 9, 1899	By examination			

5361	Blodt, John J.	December	7, 1897	By examination.	Clinton.	Holmes.
5376	Bayless, Morton M.	December	7, 1897	By examination.	Elkader.	Clarion.
5377	Runn, A. J.	January	4, 1898	By examination.	Waterloo.	Fort Dodge.
5386	Blayney, C. W.	February	1, 1898	By examination.	Oreston.	
5386	Sale, George W.	February	1, 1898	By examination.	Webster City.	
5393	Rusby, Edward E.	February	1, 1898	By examination.	Webster City.	
5404	Beck, C. O.	March	1, 1898	By examination.	Marion.	
5405	Rigelow, B. E.	March	1, 1898	By examination.	Atlantic.	Whiting.
5406	Fuck, Earnest M.	March	1, 1898	By examination.	McGregor.	Burlington.
5434	Bartholow, E. L.	March	1, 1898	By examination.	Des Moines.	Ayrshire.
5463	Batty, Alfred.	April	5, 1898	By examination.	Marshalltown.	
5485	Fuss, Fred J.	March	31, 1898	Graduate.	Iowa City.	Clinton.
5490	Bradshaw, L. S.	May	8, 1898	By examination.	Fairfield.	
5505	Barr, Henry J.	June	7, 1898	By examination.	Vinton.	Clarion.
5516	Becker, Caroline M.	July	27, 1898	Graduate.	Elkader.	
5522	Elkesser, Walter A.	July	27, 1898	Graduate.	Hawarden.	Cherokee.
5528	Beer, M. H.	July	7, 1898	By examination.	Cincinnati.	Centerville.
5535	Bradish, W. C.	August	3, 1898	Graduate.	Des Moines.	Illinois.
5536	Bradish, Charles E.	August	8, 1898	Graduate.	Des Moines.	Missouri Valley.
5538	Bedier, V. L.	August	8, 1898	Graduate.	Leon.	Elston.
5543	Barnes, Rutherford.	August	2, 1898	By examination.	State Center.	Oresco.
5557	Brown, J. O.	October	2, 1898	By examination.	Manchester.	Belmont.
5561	Bender, Ed. R.	September	2, 1898	Graduate.	Spencer.	Peterson.
5564	Bread, Robert V.	September	7, 1898	Graduate.	Davenport.	Illinois.
5565	Bedler, Eugenia L.	September	7, 1898	Graduate.	Leon.	Mount Vernon.
5613	Bowen, Charles A.	January	3, 1899	Graduate.	Keokuk.	
5620	Binzer, C. W.	January	8, 1899	By examination.	Le Claire.	Waterloo.
5628	Broesen, Niels C.	February	7, 1899	Graduate.	Audubon.	
5636	Brown, Thomas W.	February	7, 1899	By examination.	Columbus Junction.	
5640	Bell, Charles S.	April	7, 1899	By examination.	West Union.	Milton.
5663	Benham, L. A.	March	7, 1899	Graduate.	Iowa City.	North Dakota.
5697	Burton, John R.	March	7, 1899	By examination.	Merrill.	Siox City.
5731	Bronson, George S.	July	6, 1899	By examination.	McGregor.	
5749	Brincken, Herman	July	18, 1899	By examination.	Rockford.	
5751	Billingsley, F. F.	July	18, 1899	By examination.	Hampden.	
5759	Bruner, C. E.	August	1, 1899	Graduate.	Unionville.	
5770	Basart, C. E.	August	1, 1899	Graduate.	Menlo.	Olio.
5797	Brinton, Gilbert E.	September	5, 1899	Graduate.	Van Horn.	Minburn.
5806	Bauman, Lena	September	5, 1899	Graduate.	Dows.	La Porte.
5832	Brunt, John M.	October	28, 1899	Graduate.	Belburne.	Belmond.
5833	Bishop, Edmund F.	October	8, 1899	By examination.	Des Moines.	Decorah.
5835	Burke, F. J.	November	8, 1899	By examination.	Mosville.	Rhodes.
5902	Beverly, J. B.	December	6, 1899	By examination.	Des Moines.	Green.
5910	Baugh, Luther A.	February	6, 1900	By examination.	Des Moines.	Van Horn.
5913	Bolton, Conrad	February	6, 1900	By examination.	Elkader.	Missouri.
5925	Bolton, Th.	March	6, 1900	Graduate.	Elkader.	Rock Rapids.
5927	Bowman, W. E.	March	6, 1900	Graduate.	Elkader.	Center Point.
5940	Bowman, Ohas O.	March	6, 1900	Graduate.	Elkader.	Perry.
5943	Blakelock, Wm. F.	March	6, 1900	By examination.	Oakloosa.	
5948	Barnett, W. F.	March	6, 1900	By examination.	Adel.	Wayland.

Chicago.



6380	Burns, James F.	June	4, 1901	Graduate	Eddyville	.....	.....	In Colorado.
6383	Banfield, Edward	August	6, 1901	Graduate	Deerfield	.....	Charles City.	.....
6385	Babcock, Mary J.	August	6, 1901	Graduate	Des Moines	.....	.....	In Colorado.
6388	Bleack, C. H. W.	August	6, 1901	Graduate	Perry	.....	.....	In Nebraska.
6390	Beecher, F. W.	August	6, 1901	Graduate	Des Moines	.....	.....	In Illinois.
6432	Brown, Philip W.	October	1, 1901	Graduate	Des Moines	.....	.....	.....
6433	Bullinger, C. T.	October	1, 1901	Graduate	Laurens	.....	Council Bluffs.	.....
6444	Bateman, W. O.	October	1, 1901	By examination.	Seymour	.....	.....	.....
6448	Bradley, Robt. F.	November	7, 1901	Graduate	Des Moines	.....	.....	In Penn.
6449	Bessingham, Arthur E.	November	7, 1901	Graduate	Des Moines	.....	.....	In South D.
6483	Barnett, John T.	November	7, 1901	By examination.	Independence	.....	.....	.....
6484	Boyd, H. C.	November	7, 1901	By examination.	Atkinson	.....	.....	.....
6508	Bundy, J. B.	November	7, 1901	By examination.	Colfax	.....	.....	.....
6504	Bartels, Geo. A.	December	8, 1901	By examination.	Urban	.....	Lake City.	In Wisconsin.
6511	Bonst, M. V.	December	8, 1901	By examination.	Manson	.....	St. Dodge.	In Minnesota.
6512	Bachman, Gustav	January	6, 1902	Graduate	Elkader	.....	.....	In Nebraska.
6523	Brining, F. W.	January	6, 1902	Graduate	Paulina	.....	.....	In Nebraska.
6558	Butler, Harry H.	January	6, 1902	Graduate	Des Moines	.....	Cedar Rapids.	.....
6573	Brooks, C. A.	March	4, 1902	By examination.	Independence	.....	.....	.....
6577	Briggs, C. R.	March	4, 1902	By examination.	Spencer	.....	.....	.....
6579	Bender, Fred L.	March	4, 1902	By examination.	Recfield	.....	.....	.....
6586	Bailey, Carl F.	March	4, 1902	By examination.	Des Moines	.....	.....	.....
6587	Bryant, Frank C.	March	4, 1902	By examination.	Clermont	.....	.....	.....
6598	Berry, J. F.	April	1, 1902	Graduate	Iowa City	.....	.....	.....
6647	Blowers, Herbert B.	April	1, 1902	Graduate	Des Moines	.....	.....	.....
6620	Bruhn, Otto J.	April	1, 1902	Graduate	Des Moines	.....	.....	In South D.
6623	Bothe, Edw.	April	1, 1902	By examination.	Des Moines	.....	.....	In Illinois.
6625	Barnes, Chas. G.	April	1, 1901	By examination.	Des Moines	.....	.....	.....
6641	Bruckner, Theo. G.	April	1, 1901	By examination.	Parkersburg	.....	.....	.....
6642	Bird, S. R.	April	1, 1901	By examination.	Whiting	.....	.....	.....
6647	Blair, A. O.	April	1, 1901	Graduate	Keokuk	.....	.....	.....
6659	Bregenzler, John	May	5, 1902	Graduate	Britt	.....	.....	.....
6660	Brater, Harry J.	May	5, 1902	Graduate	Vincennes	.....	Lake Mills.	In Kansas.
6673	Burnett, Fred	May	5, 1902	By examination.	Des Moines	.....	.....	.....
6678	Boos, Frank H.	May	6, 1902	By examination.	Sanborn	.....	.....	.....
6684	Benson, Ray L.	May	6, 1902	Graduate	Mason City	.....	Council Bluffs.	In North D.
6720	Buttz, Wm. L.	June	20, 1902	Graduate	Ryan	.....	Tipton.	.....
6728	Beacom, Geo. M.	June	8, 1902	By examination.	Sioux City	.....	.....	.....
6743	Becker, Wm. J.	July	6, 1902	Graduate	Yale	.....	.....	.....
6744	Brook, Besse P.	August	6, 1902	Graduate	Knoxville	.....	Marshalltown.	.....
6745	Bush, Earl B.	August	6, 1902	Graduate	Earlville	.....	Bradgate.	.....
6746	Edmest, Wm. C.	August	6, 1902	Graduate	Parnell	.....	.....	.....
6747	Butler, Wm. G.	August	6, 1902	Graduate	Hampton	.....	.....	In Illinois.
6748	Bach, W. H.	August	6, 1902	Graduate	Des Moines	.....	Plover.	.....
6749	Blue, Frank A.	August	6, 1902	Graduate	Yale	.....	.....	.....
6815	Bohn, Gertrude	August	21, 1902	Graduate	St. Benedict	.....	.....	.....
6821	Binford, O. F.	August	21, 1902	Graduate	Des Moines	.....	.....	In Ohio.
6827	Boyer, H. H.	October	7, 1902	Graduate	Panora	.....	Yale.	.....

## ABSTRACT—CONTINUED.

Number of cer- tificates	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6578	Beneath, Theo	August	Graduate	Toledo.	Vining.	In South D.
6579	Brecht, Ernest A.	7, 1902	Graduate	Des Moines.	.....	In Missouri.
6580	Brown, C. W.	7, 1902	By examination.	Des Moines.	.....	In Illinois.
6581	Bakke, L. H.	7, 1902	By examination.	McCalsburg.	.....	.....
6582	Berryman, Chas. S.	6, 1902	Graduate	Des Moines.	.....	.....
6583	Boone, F. M.	6, 1902	By examination.	Grand River.	.....	.....
6584	Burson, A. G.	2, 1902	By examination.	Fonda.	.....	.....
6585	Brown, L. H.	2, 1902	By examination.	Lamont.	.....	.....
6586	Beach, B. F.	2, 1902	By examination.	Shenandoah.	.....	.....
6587	Batterson, C. E.	8, 1902	Graduate	Clinton.	.....	.....
6588	Brock, G. D.	8, 1902	By examination.	Iowa Falls.	.....	.....
6589	Berkley, Chas. H.	8, 1902	By examination.	Logan.	Klemme.	In Illinois.
6590	Benson, M. D.	8, 1902	By examination.	Eldon.	Villisca.	.....
6591	Bass, Robt. W.	8, 1902	By examination.	Randall.	Des Moines.	.....
6592	Bosworth, A. S.	7, 1902	By examination.	Rose Hill.	Ringsted.	.....
6593	Barker, H. M.	7, 1902	By examination.	Wapello.	Ute.	.....
6594	Buesch, Andrew E.	22, 1902	By examination.	Brigham.	Columbus City.	.....
6595	Bozarth, E. G.	2, 1902	Graduate	Dubuque.	Bloomfield.	.....
6596	Baird, A. H.	2, 1902	Graduate	Des Moines.	.....	.....
6597	Book, J. R.	2, 1902	By examination.	Council Bluffs.	Marble Rock.	Indian Ter.
6598	Brown, A. N.	2, 1902	Graduate	Malvern.	.....	.....
6599	Brown, O. W.	2, 1902	Graduate	Griswold.	Clearfield.	.....
6600	Benecker, John	2, 1902	.....	Missouri Valley.	.....	.....
6601	Boatord, C. W.	4, 1902	.....	Elmira.	Ossola.	.....
6602	Bear, O. S.	4, 1902	.....	Keokuk.	Collins.	.....
6603	Bell, John F. A.	4, 1902	.....	Farley.	Quakake.	.....
6604	Berry, J. C.	4, 1902	By examination.	Clinton.	Sibley.	.....
6605	Bornay, G. A.	4, 1902	.....	Gladbrook.	.....	.....
6606	Burns, C. U.	4, 1902	.....	Belmont.	.....	.....
6607	Blanch, Ralph	4, 1902	Graduate	Page Grove.	.....	Indiana.
6608	Bell, R. C. W.	6, 1902	.....	Des Moines.	Logan.	.....
6609	Burges, M. L.	6, 1902	.....	Ottumwa.	What Cheer.	.....
6610	Brodie, Jas. A.	6, 1902	By examination.	Des Moines.	.....	.....
6611	Bowditch, C. D.	6, 1902	.....	Manilla.	.....	.....
6612	Bowditch, C. D.	6, 1902	.....	Madrid.	Manchester.	.....

[illegible]

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration	Latest Reported Address.	Remarks.
492	Cole, T. R.	June 23, 1890	As owner	Marysville.		
600	Cole, John L.	15, 1890	"	Greene.		
616	Crow, William M.	June 4, 1890	"	Grand Junction.		
707	Camp, Americans.	June 4, 1890	"	Kellerton.		
708	Camp, Marshall.	June 4, 1890	"	Kellerton.		
990	Churchill, Frank.	July 5, 1890	As assistant.	Burlington.		
1007	Castle, Charles A.	June 16, 1890	"	Ottumwa.		
1151	Childs, H. A.	July 6, 1890	"	Lenox.		
1253	Coffin, R. M.	June 9, 1890	As owner	Tama City.		
1301	Cook, William A.	June 18, 1890	"	Washington.		
1405	Cummins, M. L.	July 14, 1890	"	La Porte City.		
1421	Clark, Eaton K.	June 24, 1890	"	Seymour.		
1439	Cole, D. L.	July 8, 1890	"	Bu-ey.		
1609	Clark, Edwin A.	August 27, 1890	"	Davenport.	Oskaloosa.	
1670	Carroll, J. M.	September 17, 1890	By examination	Pomeroy.	Princeton.	
1688	Campbell, William J.	August 24, 1890	"	Fort Dodge.	Laurens.	
1881	Crosby, W. A.	October 14, 1890	"	Mason City.	Hanlontown.	
1899	Chamberlain, L.	August 30, 1890	"	Marion.	Des Moines.	
2126	Coakley, J. W.	May 27, 1891	"	Mount Etna.		
2195	Corte, Frederick.	May 12, 1891	"	Union.		
2163	Cortez, S. F.	July 12, 1891	"	Riverside.		
2178	Camp, Eli R.	July 25, 1891	"	Keokuk.		
2194	Christy, W. D.	August 25, 1891	"	Afton.	Shannon City.	
2204	Conger, E. J.	August 1, 1891	"	Manchester.		
2239	Cory, George T.	August 26, 1891	"	Lewis.	Grant.	
2234	Cogswell, S. G.	September 1, 1891	"	Ottumwa.	Des Moines.	
2265	Cameron, C. E.	November 4, 1891	"	Storm Lake.	Alta.	
2251	Cognillotte, W. E.	February 25, 1892	"	Coggon.		In Illinois.
2449	Crissinger, J. C.	June 6, 1892	"	Farmhamville.		
2622	Cunningham, A. S.	April 24, 1893	"	Coggon.	Goldfield.	
2645	Chopper, W. T.	September 12, 1893	"	Le Mars.		
2661	Cook, V. W.	October 22, 1893	"	Lake City.		
2740	Camp, John W.	April 15, 1894	"	Council Bluffs.		In Polo, Ill.
2792	Campbell, C. E.	August 6, 1894	"	Collins.		
2872	Conley, H. C.	April 21, 1895	"	Magnolia.	Boone.	
3040	Connolly, William.	December 1, 1895	"	Greene.		
3074	Cole, George T.	February 2, 1896	"	Greene.		

Crady, Edward E.	March	9, 1896	By examination	Cherokee	Seattle, Wash.
Cole, J. P.	May	15, 1896	"	Williams	Jewell
Coplin, Pascal T.	September	17, 1896	"	Emmeleburg	West Bend.
Cope, W. J.	October	5, 1896	"	Atalissa	Muscatine.
Colvin, A. W.	October	6, 1896	"	Manchester	"
Chamilton, Ira W.	January	4, 1897	"	Kewick	"
Chastain, George W.	February	14, 1897	"	Rolle	"
Chastain, S. E.	October	4, 1897	"	Winnetset	"
Chick, E. B.	December	12, 1897	"	Des Moines	"
Chick, F. B.	February	27, 1898	"	Ottumwa	"
Carmichael, J. H.	February	27, 1898	Graduate	Rockwell City	Ashton.
Cunningham, T. C.	February	27, 1898	By examination	Clinton	"
Conner, John	August	4, 1898	"	Rapoleon	Emerson, Neb.
Conner, C. F.	August	4, 1898	"	Clinton	"
Cook, J. C.	September	21, 1898	"	Shoop River	"
Cummings, I. P.	October	25, 1898	"	Shout City	"
Cox, John C.	October	19, 1898	"	Washington	Oedar Rapids.
Cook, Charles A.	February	19, 1899	"	New Hampton	Ocheyedian.
Cockwin, Joel E.	March	9, 1899	"	Boone	Ames.
Chase, Charles V.	April	23, 1899	"	Lawsonport	"
Chase, W. T.	April	23, 1899	Graduate	South English	"
Coffman, W. T.	May	7, 1899	By examination	Lawson	Jewell.
Cole, Victor F.	May	31, 1899	"	Nichols	"
Carl, F.	June	18, 1899	"	Clinton	Burton.
Cooper, B. F.	August	20, 1899	"	Garnett	Esterville.
Collins, Carrie S.	September	8, 1899	"	Spencer	Waverloo.
Cottrell, George D.	September	17, 1899	"	Conrad Bluffs	"
Camp, George F.	November	15, 1899	By examination	Iowa City	Center Point.
Carlson, J. W.	December	16, 1899	"	West Union	Achton.
Cobb, Edward T.	December	19, 1899	"	Rodney	Oedar Rapids.
Chandler, C. H.	January	7, 1900	"	Gilman	Bloomfield.
Crunk, Charles H.	January	29, 1899	"	Cresco	"
Connolly, J. P.	February	4, 1899	"	Ft. Dodge	"
Crawford, Charles J.	February	24, 1899	"	Crawfordville	"
Campbell, D. C.	March	4, 1899	Graduate	Fairfield	Jewell
Collins, D. C.	March	1, 1899	By examination	Salix	"
Cole, Charles F.	April	15, 1899	"	Harlington	California.
Chadwick, J. B.	August	5, 1899	"	Renwick	Jewell.
Cochran, W. L.	January	18, 1891	"	Des Moines	Woden.
Cole, W. F.	February	8, 1891	"	Menlo	Rock Island, Ill.
Cunningham, C. L.	March	24, 1891	"	Salem	"
Curtis, H. E.	May	1, 1891	"	Thayer	Afton.
Crew, A. S.	June	2, 1891	"	Clermont	"
Coltrane, M. B.	August	5, 1891	"	Low Falls	Charles City.
Cowan, John D.	August	11, 1891	"	Marengo	"
Clements, I. W.	December	8, 1891	"	Knoxville	Eldora.
Coveny, T. H.	February	1, 1892	"	Ashton	Lohrville.
Carmichael, C. C.	February	28, 1892	"	Galeburg	Sully.
Carpenter, O. C.	February	26, 1892	"	Des Moines	Emerson.
Collins, E. C.	March	7, 1892	Graduate	Des Moines	"
Cox, James Edward	March	12, 1892	"	"	"



4634	Cole, Mrs. Ella C.	April	17, 1894	By examination	Renwick.	Galesburg.	
4634	Carpenter, Fred F.	June	10, 1894	"	Des Moines		
4675	Cassidy, Leon M.	October	12, 1893	"	Danison		
4681	Crow, Raymond E.	September	12, 1893	"	Grand Junction.	Libertyville.	
4720	Gleashy, A. B.	October	2, 1894	"	Corbettville		
4726	Grossman, W. P.	October	2, 1894	"	Toledo.		
4764	Cole, Francis C.	November	30, 1894	"	Wilson Junction.	Davenport.	
4768	Cope, Omar L.	November	13, 1894	"	Cedar Rapids	Idaho.	
4776	Craddock, W. W.	December	13, 1894	"	Knoxville	California.	
4783	Grosley, Mont.	December	4, 1894	"	Laurens	Randall	
4785	Goveney, J. Frank.	December	4, 1894	"	Chelsea	Coffey	
4818	Gollins, T. D.	February	5, 1896	"	Emmetsburg.	Grettinger.	
4829	Cloe, John W.	March	5, 1895	"	Knoxville	Arkansas.	
4834	Catlin, F. S.	March	5, 1895	"	Iowa Falls	Mason City.	
4864	Clarke, Anna Z.	April	2, 1894	"	What Cheer	Oskaloosa.	
4892	Cliley, Will W.	June	5, 1894	"	Wapello.	Mediapolis.	
4918	Countermains, I. H.	August	9, 1895	"	Marens	Salix.	
4926	Corfe, Edw. W.	September	10, 1895	"	Union.		
4927	Connors, Edw. E.	September	10, 1895	"	Livermore	Algona.	
4934	Clemens, W. C.	December	8, 1895	"	Wapello	Clemons, Mont.	
4966	Cooke, S. R.	December	8, 1895	"	West Union	Winthrop.	
4999	Collins, E. E.	February	4, 1896	"	Des Moines	Oskaloosa.	
5005	Carpenter, C. M.	February	25, 1890	By examination	Kewick.		
5045	Cameron, Mabel.	April	7, 1896	"	Moulton	Unionville.	In Missouri.
5065	Carr, O. G.	June	2, 1896	"	Manchester	Park City, Mont.	
5128	Conger, H. G.	January	3, 1894	"	Milton		
5147	Copeland, J. W.	December	1, 1896	Graduate	Fairfield.		
5147	Cantwell, J. Y.	September	2, 1896	By examination	Davenport.		
5164	Coon, L. E.	October	6, 1896	"	Des Moines	Fairbury, Neb.	
5178	Carter, J. H.	November	10, 1893	"	Des Moines	Oelwein.	
5212	Collins, A. R.	December	1, 1896	"	Tras.	Thompson.	
5226	Cahill, J. L.	March	2, 1897	"	Buffalo Center.	Iowa City.	
5237	Cooper, Zada	March	9, 1897	"	Quasqueton	Klemme.	
5237	Crawford, C. A.	July	6, 1897	"	Bristow		
5298	Curran, W. D.	July	6, 1897	"	Morning Sun.		
5302	Coons, Oscar A.	August	7, 1897	Graduate	Carson	Kansas City, Mo.	
5355	Clark, C. B.	November	9, 1897	By examination	Gilbert Station.	Ogden.	
5379	Coleman, Carl	January	4, 1898	"	Farragut.	Clutter.	
5383	Cook, Roy L.	January	4, 1898	"	North English.		
5383	Childs, A. A.	February	1, 1898	"	Lenox.	California.	
5391	Cameron, J. Ross.	February	1, 1898	"	Manchester	Sheldon.	
5425	Cajacob, J. R.	February	1, 1898	"	Sibley	Sioux Rapids.	
5437	Cone, Ernest R.	March	1, 1898	"	Laurens		
5439	Christensen, S. A.	August	6, 1893	"	Sioux Rapids.		
5449	Callen, F. W.	April	6, 1898	"	Eldon.		
5460	Campbell, Boston.	April	5, 1898	"	Ottumwa.		
5461	Cragg, George W.	April	5, 1898	"	Mason City.		
5483	Carney, E. H.	May	3, 1898	"	Cedar Falls.		
5483	Chilson, E. M.	June	7, 1898	"	Ocheyedan.	Minneapolis, Minn.	

In South Dakota

## ABSTRACT—CONTINUED.

Number of Certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5514	Carr, Edward.	July 27, 1898	Graduate	Salix.		
5515	Carr, C. C.	July 27, 1898	Graduate	St. Madison.		
5516	Craven, J. W.	August 2, 1898	By examination	Village.	Oakland.	
5517	Campbell, James B.	October 4, 1898	Graduate	Des Moines.	Oscar Rapids.	
5518	Clutter, B. A.	October 4, 1898	By examination	Newton.	Ames.	
5519	Carver, R. F.	November 1, 1898	"	Colo.	Jewell.	
5520	Christensen, John.	November 3, 1898	Graduate	St. Dodge.	Herman, Neb.	
5521	Car, John J.	January 7, 1899	By examination	Muscatine.	Lovilla.	
5522	Coulson, H. C.	February 7, 1899	Graduate	Muscatine.		
5523	Cash, W. Frank	March 7, 1899	"	Brooklyn.	Chelsea.	
5524	Campbell, Le Roy	March 7, 1899	By examination	Council Bluffs.		
5525	Coy, Mart C.	April 4, 1899	"	Underwood.		
5526	Carstensen, L. P.	April 17, 1899	Graduate	Hazelton.		
5527	Chamberlain, L. H.	May 6, 1899	By examination	Davenport.		
5528	Critz, L. W.	May 18, 1899	By examination	Des Moines.	Colorado.	
5529	Cain, R. B.	July 1, 1899	Graduate	Riverside.		
5530	Cochett, James H.	August 1, 1899	By examination	Etherville.		
5531	Cronin, D. J.	August 1, 1899	By examination	Bayard.		
5532	Carpenter, W. S.	August 1, 1899	By examination	Charter Oak.	In Nebraska.	
5533	Candfield, C. W.	September 29, 1899	Graduate	West Point.	Des Moines.	
5534	Cookley, John F.	September 29, 1899	By examination	Geneva.	Chicago, Ill.	
5535	Clark, Toland J.	November 9, 1899	Graduate	Parnell.		
5536	Collins, M. J.	December 6, 1899	By examination	Humeston.	Eddyville.	
5537	Clark, J. A.	March 6, 1900	By examination	Fairbank.		
5538	Childs, George S.	March 6, 1900	"	Missouri Valley.		
5539	Coppeland, B. E.	March 6, 1900	"	Council Bluffs.	Ocon Rapids.	
5540	Carroll, Clara M.	March 6, 1900	"	Fairfield.		
5541	Carmean, George W.	May 1, 1900	Graduate	Iowa City.	Colville, Wash.	
5542	Cliff, Jesse.	May 5, 1900	"	Leon.	Albia.	
5543	Carlson, L. D.	June 3, 1900	"	Des Moines.	Panora.	
5544	Carstensen, C. L.	July 3, 1900	By examination	Des Moines.	Missouri.	
5545	Chinn, Bernice G.	July 3, 1900	"	Logan.	Council Bluffs.	
5546	Conradt, Charles L.	August 7, 1900	Graduate	Des Moines.	Camp Douglas, Wis.	
5547	Cole, T. Clifton	August 7, 1900	"	Holland.		
5548	Covault, H. M.	September 4, 1900	By examination	Thurman.		
5549		September 4, 1900	"	Des Moines.		Wisconsin.

6172	Childs, I. B.	November	8, 1900	Graduate	Persia	Bart.
6183	Cockert, R. F.	December	4, 1900	By examination	Churdon	Lehigh.
6190	Calpin, J. F.	December	4, 1900	By examination	Clinton	Eldora.
6200	Carey, John F.	December	4, 1900	By examination	Clinton	Webster City.
6224	Clem, Steve M.	February	5, 1901	Graduate	Shenandoah	Essex.
6288	Challand, Charles W.	May	7, 1901	Graduate	Cedar Rapids	Norway.
6334	Coye, Charles H.	May	7, 1901	Graduate	Alta	Tingley.
6360	Christensen, N. A.	May	7, 1901	Graduate	Muscantine	
6367	Cone, William E.	May	7, 1901	Graduate	Farragut	
6312	Coleman, A. D.	May	6, 1901	Graduate	Perry	
6318	Coakley, J. B.	June	4, 1901	By examination	Maxwell	
6328	Connell, John	June	4, 1901	By examination	Red Oak	In Minnesota.
6331	Casey, D. W.	June	4, 1901	By examination	Ogden	
6332	Cooper, T. C. S.	June	4, 1901	Graduate	Lime Springs, Minn.	
6344	Crew, James H.	July	2, 1901	Graduate	Des Moines	In Montana.
6347	Coffee, Sid J.	July	2, 1901	Graduate	Des Moines	Sioux City.
6357	Crum, R. R.	August	6, 1901	Graduate	Nora Springs	
6371	Cutler, Tyna M.	August	6, 1901	Graduate	Zearing	
6376	Clift, Guy E.	August	6, 1901	Graduate	Des Moines	Tracy.
6386	Cooper, Anos V.	August	6, 1901	By examination	Burlington	
6421	Chaloupka, Edward C.	September	8, 1901	By examination	Otley	
6423	Chok, C. P.	September	8, 1901	By examination	Menlo	Stuart
6451	Crowder, Chas. C.	October	1, 1901	Graduate	Des Moines	Schaller.
6465	Cowles, E. G.	October	1, 1901	By examination	Council Bluffs	Ventura.
6474	Clausen, C. N. W.	November	11, 1901	Graduate	Cedar Falls	St. Paul.
6485	Check, Chas. K.	December	8, 1901	By examination	Mason City	Deep River.
6494	Cain, Chas. K.	December	8, 1901	By examination	Colfax	Iowa Falls.
6535	Cowan, H. L.	February	4, 1902	Graduate	Storm Lake	Illinoia.
6539	Cady, Wm. E.	March	4, 1902	Graduate	Clinton	Atlantic.
6543	Cramer, Ralph	March	4, 1902	By examination	Albia	Deep River.
6571	Crain, Mattie	April	1, 1902	Graduate	Farlin	Deep River.
6592	Crain, Louis F.	April	1, 1902	Graduate	Farlin	
6600	Cove, Elmer L.	April	1, 1902	By examination	Ames	Cedar Rapids.
6632	Clark, C. A.	April	1, 1902	By examination	New Hampton	In Illinois.
6692	Cummins, Wm. M.	May	5, 1902	Graduate	Rockwell City	In S. Dakota.
6777	Crowley, S. R.	May	5, 1902	Graduate	Des Moines	
6822	Crites, A. M.	June	6, 1902	By examination	Des Moines	In Missouri.
6822	Crivlon, Rose M. E.	June	8, 1902	Graduate	Clear Lake	In Illinois.
6719	Chiles, Emmet M.	June	20, 1902	Graduate	Woodbine	
6753	Chey, John R.	August	5, 1902	By examination	Des Moines	Emerson.
6761	Cady, Clarence W.	August	5, 1902	By examination	Atlantic	
6790	Calwallater, J. M.	August	5, 1902	By examination	Ottumwa	Barnum.
6797	Cooler, W. H.	August	5, 1902	By examination	Jeau	
6798	Clark, B. P.	August	5, 1902	By examination	Ogden	
6806	Carraig, Blanch M.	October	7, 1902	Graduate	Council Bluffs	
6840	Cavanaugh, Thos. J.	November	7, 1902	Graduate	Des Moines	
6907	Carle, Edgner E.	December	2, 1902	By examination	Knoxville	Ames.

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6018	Cameron, Harry D.	February	Graduate	Sioux City.	Corwith.	
6019	Carmine, Jas. W.	February	By examination.	Sioux City.		
6022	Clark, C. B.	February	"	Hampton.		
6013	Clark, Chas. M.	February	"	Newhall.		
6014	Cordell, Elmer E.	February	Graduate	Des Moines.	Mt. Pleasant.	
6015	Cork, Fred B.	March	"	Des Moines.	Enterprise.	
6016	Crosby, Emmet H.	March	By examination.	Des Moines.	Albany.	
6017	Collins, D. P.	April	"	Des Moines.	Iowa City.	
6018	Cochran, John F.	April	"	Lacota.	Columbia.	
6019	Collins, E. G.	April	Graduate	Lacota.		
7040	Cord, W. A.	June	"	Lacota.		
7050	Craig, W. D.	June	By examination.	Hall.		
7064	Coleman, Geo.	August	Graduate	Henderson.	Hynes.	
7104	Cornell, P. C.	August	"	Fonda.		
7107	Cotton, G. A.	August	"	Greenfield.	Utopia.	
7108	Connor, T. J.	August	"	Des Moines.	Illinois.	
7109	Cobalan, M. E.	August	"	Dubuque.	Templeton.	
7110	Childs, F. S.	August	"	Waukon.	What Cheer.	
7116	Crew, W. F.	October	"	Burlington.	Illinois.	
7157	Conway, L. E.	October	By examination.	Des Moines.	Illinois.	
7190	Charlier, G. D.	October	Graduate	Dubuque.	New Mexico.	
7217	Carragher, Chas.	November	"	Clermont.	Rudd.	
7218	Clark, F. M.	November	"	Oakland.	Illinois.	
7265	Campbell, O. G.	February	By examination.	Galva.	Waukon.	
7267	Claude, Grace	February	"	Newhall.	Wyoming.	
7281	Cobbie, F. A.	April	"	Des Moines.	Harlan.	
7248	Chenoweth, C. B.	April	"	Dows.		
7246	Chesebrough, S.	April	"	Atalissa.		
7244	Coffman, W. T.	April	"	South English.		
7211	Corlett, C. M.	July	Graduate	Iowa City.	Wisconsin.	
7230	Candler, G. A.	July	"	Dubuque.		
7237	Claybaugh, H. L.	July	"	Sioux City.		
7238	Creedon, F. B.	July	"	Dubuque.	North Dakota.	
7239	Cooper, H. G.	July	"	Waterloo.	Illinois.	
7240	Cofflet, L. L.	July	"	Macedonia.	Tracer.	
7241	Carlson, O. F.	August	"	Des Moines.	Marathon.	
7257	Campbell, E. V.	August	"	Rowan.		
7253		August	"			

7490	Conzenius, W. L.	August	2, 1904	By examination	New Hampton.	Minnesota.
7619	Cutler, H. W.	October	4, 1904	Graduate	Osage.	New Jersey.
7628	Curtis, H.	October	4, 1904	"	Des Moines.	Alabama.
7634	Chandler, H. G.	December	6, 1904	"	Des Moines.	Harcourt.
7651	Collins, J. H.	December	6, 1904	By examination	Clare.	
7653	Conrad, Belle H.	February	7, 1905	"	Webster City.	
7660	Copeland, L. E.	February	7, 1905	"	Lenox.	
7666	Cott, G. C.	April	4, 1905	"	Rolfe.	South Dakota.
7681	Clute, F. H.	April	2, 1905	Graduate	Des Moines.	
7684	Conway, M. E.	June	6, 1905	By examination	Des Moines.	
7690	Cornely, A. E.	June	6, 1905	Graduate	Owase.	South Dakota.
7698	Coverdale, J. L.	June	6, 1905	"	Des Moines.	North Dakota.
7698	Clemens, E. E.	July	12, 1905	"	Des Moines.	Clermont.
7703	Crowe, W. C.	August	1, 1905	"	West Union.	South Dakota.
7713	Chenington, C. A.	August	1, 1905	"	Decatur.	Kansas.
7715	Canfield, B. H.	August	1, 1905	By examination	De Moines.	Atlantic.
7718	Campbell, J. E.	August	1, 1905	"	Valley Junction.	
7719	Campbell, Charles	August	1, 1905	"	Des Moines.	
7905	Daniel, Philip H.	June	21, 1890	As owner	Bellevue.	
7920	Danbar, George B.	June	15, 1890	"	Le Mars.	
840	Davis, J. Mahlon	June	12, 1890	"	Center Point.	
769	Dautschman, A.	June	7, 1890	"	Lewis.	
868	Dunn, John W.	June	6, 1890	As assistant	Muscatine.	
917	Dunn, John W.	July	1, 1890	A- owner	Derby.	
992	Duffield, George W.	June	26, 1890	As principal	Centerville.	Denver, Col.
1023	Doty, Elmer A.	June	19, 1890	As owner	Oxford.	
1090	Douglass, R. N.	June	7, 1890	"	Postville.	
1094	Dumont, T. A.	August	7, 1890	"	Dumont.	
1594	De Haven, J. O.	August	30, 1890	"	Council Bluffs.	Red Oak.
1632	Duke, Charles D.	August	2, 1890	By examination	Marshalltown.	
1632	Davis, M. W.	July	30, 1890	"	Iowa City.	
2243	DeKalb, Benj. D.	September	28, 1891	"	De Kalb.	Out of business.
2302	Davis, J. D.	November	1, 1891	"	Nassau.	
2324	Oash, Edward	December	27, 1891	"	Guthrie Center.	Beaver Crossing, Neb.
2329	Doty, C. W.	January	24, 1892	"	Newell.	Glenwood.
2433	DeWitt, C. H.	May	10, 1892	"	Lucas.	Glenwood.
2554	DeWitt, W. W.	December	19, 1892	"	Peterson.	
2565	Doolittle, W. A.	January	9, 1893	"	Columbus Junction.	East Point, Ga.
2947	Davis, Will A.	March	9, 1895	"	Ferguson.	
2962	Douglass, C. W.	April	21, 1895	"	Calmar.	Council Bluffs.
2991	Douglass, E. F.	June	6, 1895	"	Dysart.	
2990	Driscoll, J. E.	July	8, 1895	"	Davenport.	
2992	DeKruif, P. J.	September	9, 1895	"	Orange City.	
2968	Draper, J. S.	January	8, 1896	"	Boone.	Perry.
2970	Dean, Frank A.	February	17, 1896	"	Dunlap.	Estherville.
3011	Dickey, E. L.	May	19, 1896	"	Marshalltown.	Spencer.
3063	De Marsha, F. E.	June	15, 1896	"	Radcliff.	
3064	Dennison, John O.	June	16, 1896	"	Maquoketa.	Bellevue.
3063	Dyer, Henry W.	July	20, 1896	"	Pomeroy.	Charter Oak.
3191	Doan, H. O.	March	1, 1897	"	Humboldt.	

## ABSTRACT—CONTINUED.

Number of copy	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
8291	Dingman, G. W. Jr.	August 15, 1887	By examination	Urbana.	.....	In Pierce, Neb.
8316	Donaldson, W. B.	September 19, 1887	"	Salem	.....	Sutherland.
8318	Dannan, Fred W.	September 20, 1887	"	St. Anthony.	.....	"
8321	Dingley, Frank W.	September 27, 1887	"	Albion.	.....	"
8349	Deakin, James W.	November 29, 1887	"	Des Moines.	.....	In California.
8393	Dankelberg, E. E.	February 24, 1888	"	Fredericks	.....	Waterloo.
8398	Davis, W. B.	February 22, 1888	"	Lewis.	.....	Tripoli.
8459	Dash, G. W.	May 13, 1888	"	Lucas	.....	Brighton.
8477	Dostal, Joseph L.	August 20, 1888	"	Cedar Rapids.	.....	"
8506	Diddy, Claude A.	January 29, 1889	"	Adel	.....	Bedfield.
8543	Davis, G. G.	February 16, 1889	"	Denison	.....	Indiana.
8542	Dewey, William H.	April 16, 1889	"	Noville.	.....	"
8543	Dodd, A. B.	April 16, 1889	"	Toledo	.....	Charles City.
8705	Dunkle, W. B.	August 10, 1889	"	Gilman.	.....	"
8786	Doyle, C. E.	October 14, 1889	"	Logan	.....	Hamburg.
8791	Dean, Alfred F.	December 14, 1889	"	Rundlap	.....	Rockwell City.
8811	Doan, Frank L.	December 30, 1889	"	Mapleton	.....	Des Moines.
8821	Dondina, Chas. B.	January 29, 1890	"	Cresco	.....	Colfax.
8822	Downs, A. W.	February 4, 1890	"	Bayard	.....	Springville.
8849	Devendorf, W. A.	March 4, 1890	"	Moulton	.....	Ottumwa.
8854	Deaton, D.	March 15, 1890	"	Union	.....	Story City.
8856	DeNeul, John P.	November 11, 1890	"	Rock Valley	.....	Lime Springs.
8890	Doughlass, A.	November 11, 1890	"	George	.....	Adel.
8920	Dodson, William F.	February 11, 1891	"	Des Moines	.....	Vallebo.
8927	Davis, George B.	February 18, 1891	"	Shenandoah	.....	"
4019	Dodd, Oad	February 27, 1891	"	Council Bluffs	.....	Barter.
4183	Dorle, William J.	March 17, 1892	"	Collins	.....	Newton.
4207	Dorle, O. H.	February 17, 1892	"	Perry	.....	"
4264	Diermer, W. F.	April 2, 1892	"	Davenport	.....	Denver, Colo.
4265	Dobson, Mrs. M. H.	May 5, 1892	"	Stout City	.....	"
4276	Dorgan, John J.	July 7, 1892	"	Clinton	.....	Wellsburg.
4357	Dale, John R.	July 20, 1892	"	LeGrand	.....	"
4357	Davis, Frank R.	January 8, 1893	"	Davenport	.....	Fremont.
4404	Dunfield, O. J.	February 23, 1893	"	Waterloo	.....	Polk City.
4482	Dixon, George W.	March 12, 1893	"	Des Moines	.....	In Colorado.
		March 5, 1893	"	Centerville	.....	"
		July 5, 1893	"	Colfax	.....	New Mexico.

Daquard, Theo.	1898	August	Davenport.	Rockwell.	Oklahoma Ter.
Dattmar, Adolph C. H.	1898	October	Fort Dodge.	Stanton, Neb.	
Drummond, O. M.	1898	December	Mount Pleasant.	Barlington.	
De Smith, C. F.	1894	February	Charles City.	Shenandoah.	
Dehlander, Charles A.	1894	February	Des Moines.		
Dick, O. K.	1894	April	Des Moines.		
De Witt, C. E.	1894	May	Wyoming.		
Duncan, O. E.	1894	May	Mediapolis.		
Dixon, John S.	1894	June	Mason City.		
Dixon, F. A.	1894	September	Lohrville.		
Derzhelmer, W. F.	1894	November	Spirit Lake.		
Donnelly, William	1895	January	Evan.		
Denton, Robert A.	1895	February	Manchester.		
Davies, W. T. T.	1895	May	Stibler.		
Duncan, James H.	1895	July	Decorah.		
Diamond, J. A.	1895	June	Princeton.		
Davis, George W.	1895	September	Dennelston.		
Davis, C. R.	1895	November	Roife.		
Daguerthy, A. E.	1895	January	Colo.		
Dooley, E. P.	1895	March	Perry.		
Dillon, I. H.	1895	April	Jerome.		
Durette, Ella B.	1895	March	Des Moines.		
Davis, Ella	1895	May	Malcom.		
Dillon, George W.	1895	June	Northwood.		
DeLander, E. C.	1895	August	Madrid.		
DeLaune, James	1895	December	Oaeg.		
Davis, George H.	1895	June	Remsen.		
Dauchel, H. A.	1897	July	Dow City.		
Davenport, Robert E.	1897	December	Andrew.		
Dale, Dorothea B.	1897	January	Stoux City.		
Dor gelich, H.	1897	February	Fremon.		
Davis, F. J.	1898	April	Anamosa.		
Druet, A. L.	1898	May	Fairbank.		
Dayton, Lizzie A.	1898	October	Marvaville.		
Dierkes, Fred, Jr.	1898	December	Lime Springs.		
Dean, W. E.	1898	March	Bellevue.		
Daubenberger, H. A.	1898	April	Bedford.		
Dabney, Maurice J.	1898	April	Rockwell.		
Daugherty, Barbara E.	1898	April	Oakland.		
Downs, J. A.	1898	May	Charlton.		
Delaney, Jerry O.	1898	May	Des Moines.		
Dowds, Frank B.	1898	August	Iowa City.		
Doolittle, H. M.	1898	September	Lewis.		
De Lacy, V. Sherwood	1898	September	Carson.		
Daughney, W. J.	1898	December	Alta.		
Deer, John F.	1898	February	Antalises.		
Dillon, Lloyd T.	1898	February	Missouri Valley.		
Dows, Milton B.	1898	February	Northwood.		
Davis, L. E.	1898	February	Lewis.		
	1898	February	Whittemore.		

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5918	Doffing, Nick.....	February 8, 1900	By examination.....	Audubon.....	Extra Iowa Falls.	In Illinois.
5943	De Ford, D. H.....	March 6, 1900	"	Centrl.....	Carlisle.	
5969	Dowd, Ira E.....	March 6, 1900	"	Guthrie Center.....	Marshalltown.	
5985	Edgeman, John T.....	March 6, 1900	"	Des Moines.....	Illinois.	In Illinois.
6046	Delly, Henry C., Jr.....	June 5, 1900	"	Calmar.....	Mason City.	
6065	Dykstra, R. R.....	June 5, 1900	"	Orange City.....	Muscatine.	
6067	Dewey, Judd E.....	June 5, 1900	"	Hartley.....	St. Arnsagar.	In Illinois.
6081	Dunham, E. I.....	July 3, 1900	"	Dubuque.....	South Dakota	
6072	Dorf, J. E.....	July 3, 1900	As assistant.....	Spirit Lake.....	Webster City.	
6076	Derthelmer, F. B.....	July 4, 1900	Graduate.....	Victor.....	Blockton.	In Illinois.
6158	Deitrich, J. P.....	December 4, 1900	By examination.....	Creco.....	Lohrville.	
6235	Drybread, J. E.....	February 2, 1901	"	Des Moines.....	Des Moines.	
6271	Dale, Charles C.....	April 7, 1901	Graduate.....	Red Oak.....	Yale.	In Wisconsin.
6619	Deur, William E.....	May 4, 1901	"	Fonda.....	North Dakota.	
6338	Davis, James B.....	June 4, 1901	By examination.....	Des Moines.....	Indianola.	
6343	Duster, Jeter J.....	July 2, 1901	"	Boone.....	Wisconsin.	In Illinois.
6352	DeFrehm, Chas.....	July 2, 1901	By examination.....	Garden Grove.....	Des Moines.	
6354	Daubenberger, E. V.....	July 9, 1901	"	Danbury.....	Des Moines.	
6380	Donavan, Gertrude.....	August 6, 1901	Graduate.....	Luverne.....	Yale.	In Illinois.
6386	Davis, N. W.....	August 1, 1901	"	Panora.....	Des Moines.	
6434	Duff, Chas M.....	August 1, 1901	"	Clinton.....	North Dakota.	
5495	Diehl, Herman.....	October 1, 1901	"	Lemars.....	Indianola.	In Illinois.
6490	Deasel, Frank W.....	October 7, 1901	By examination.....	Danbury.....	Wisconsin.	
6496	Dorschelmer, George V.....	November 8, 1901	Graduate.....	Luverne.....	Des Moines.	
6505	DeVilbiss, J. W.....	December 8, 1901	By examination.....	West Point.....	Des Moines.	In Illinois.
6506	Deardorff, V. G.....	December 8, 1901	"	Conway.....	Des Moines.	
6556	Desmond, W. J.....	February 1, 1902	"	West Point.....	Des Moines.	
6558	Deardorff, John T.....	February 4, 1902	Graduate.....	Sarg. Bluffs.....	Hornick.	In Illinois.
6600	Differdang, Maggie.....	March 1, 1902	"	Mytic.....	Oelwela.	
6602	Deyne, T. H.....	April 1, 1902	By examination.....	Danbury.....	Wisconsin.	
6678	Delander, Z. W.....	April 6, 1902	"	Madrid.....	Des Moines.	In Illinois.
6679	Deonglass, M. V.....	May 6, 1902	"	Runnels.....	Des Moines.	
6690	Draper, E. E.....	May 6, 1902	"	West Point.....	Des Moines.	
6718	DeVilbiss, W. R.....	June 20, 1902	Graduate.....	Des Moines.....	Des Moines.	In Illinois.
6724	Derland, Fred L.....	June 20, 1902	"	Des Moines.....	Des Moines.	
6762	Davidson, James A.....	August 5, 1902	"	Des Moines.....	Des Moines.	
6768	Davis, Eugene.....	August 5, 1902	"	Des Moines.....	Des Moines.	

6754	Drill, I. G.	August	5, 1903	Graduate	Eagle Grove.	Pocahontas.
6831	Doolin, John O.	October	7, 1902	"	New Hartford.	Marysville.
6837	Dunlap, J. W.	November	5, 1902	"	Koscaqua.	Milton.
6818	Dunahoe, Glen N.	February	8, 1903	"	Moulton.	Des Moines.
6919	Downing, E. A.	February	3, 1903	"	Missouri Valley.	Logan.
6920	Doty, LeRoy	February	3, 1903	"	Des Moines.	Greene.
6930	Doore, H. O.	April	7, 1903	"	Des Moines.	Illinois.
6931	Dykstra, Chas.	April	7, 1903	"	Stout City.	In South Dak.
7010	Douglasa, G. R.	May	5, 1903	Graduate	Boone.	In Alabama.
7030	Leerrick, T. H.	April	22, 1903	By examination	Madrid.	Columbia.
7030	Dalander, S. A.	May	5, 1903	By examination	Iowa City.	Nichols.
7050	Duncan, C. E.	July	1, 1903	Graduate	Beaver.	
7048	DeWitt, F. T.	July	14, 1903	By examination	Spillville.	
7158	Dempsay, D. P.	October	6, 1903	Graduate	Volga.	
7159	Duff, M.	October	6, 1903	"	Des Moines.	In Nebraska.
7160	Dean, F. J.	October	6, 1903	"	Des Moines.	In Illinois.
7161	DeFord, J. E.	October	6, 1903	By examination	Menlo.	
7200	Dugdale, J. M.	November	2, 1903	Graduate	Mason City.	In Missouri.
7220	Duncan, L. A.	November	2, 1903	Graduate	Stout City.	In Missouri.
7238	Drain, Alonzo	December	1, 1903	"	Kokuk.	
7240	Javis, H. T.	December	1, 1903	"	Des Moines	
7296	Dowd, P. W.	December	1, 1903	By examination	Guthrie Center.	
7306	Dunning, J. W.	February	2, 1904	"	Chillicothe.	
7308	Dunning, G. E.	February	2, 1904	"	Glencoe.	
7346	Daniels, M. E.	April	5, 1904	"	Chariton.	Vail.
7392	Davis, R. T.	June	7, 1904	"	Lacona.	Harlan.
7394	Dreyer, Arend.	May	7, 1904	"	Landing.	In Illinois.
7440	Dunn, Minnie	July	20, 1904	Graduate	Aplington.	
7448	Dow, H. L.	July	1, 1904	By examination	Iowa City.	
7459	Dow, J. F.	August	2, 1904	"	Williams.	
7596	Diddy, F. E.	February	7, 1905	Graduate	Perry.	Clinton.
7623	Davis, J. A. F.	May	18, 1905	"	Redfield.	
7626	Dayton, G. M.	June	6, 1905	"	Elma.	
320	Dougherty, J. B.	June	6, 1905	As owner.	Des Moines.	In Illinois.
443	Enzel, John L.	June	18, 1890	"	Stout City.	
443	Emelise, Hugo A.	June	17, 1890	"	Clear Lake.	
500	Eddy, William M.	June	7, 1890	"	Davenport.	
944	Emery, J. F.	June	7, 1890	"	Marengo.	
1001	Elliott, W. D.	June	16, 1890	"	Northwood.	Mason City.
1284	Eldridge, C. G.	June	2, 1890	"	Ottumwa.	
1416	Ennis, William W.	July	12, 1890	As principal	Sabula.	
1646	Ellick, Thomas B.	August	24, 1890	As owner	Ottumwa.	
1710	Ellis, Clark	July	81, 1890	By examination	Lehigh.	Webster City.
1781	Evans, Warren B.	September	28, 1890	As owner	Little Sioux.	
1967	Everett, F. G.	January	17, 1881	"	Dow City.	Arlon.
2123	Elliott, W. B.	April	30, 1881	By examination	Fairbank.	
2360	Ellis, George F.	February	17, 1882	"	Knoxville.	Klemme.
2398	Ellis, G. V.	August	30, 1882	"	Grundy Center.	Washington.
3008	England, L. E.	August	30, 1886	"	Calope.	Gilmore City.
					Grand Junction.	

## ABSTRACT—CONTINUED.

Number of cert. IFICATE.	Name.	Date of Registra- tion.	How Registered.	Place of Registra- tion.	Latest Reported Address.	Remarks.
2994	Engelhartson, R.	March 2, 1895	By examination	Decorah.	Decorah.	
3013	Earle, W. C.	June 1, 1895	"	Des Moines.	Des Moines.	
3239	Elson, Hugh	May 17, 1897	"	Mason City.	Northwood.	In Missouri.
3293	Emery, George M.	July 24, 1897	"	Essex.	Red Oak.	
3345	Ericsson, G. B.	November 14, 1897	"	Missouri Valley.	Council Bluffs.	
3420	Elliot, S. S.	April 2, 1898	"	Carroll.	Le Mar.	
3565	Elch, Joseph F.	November 20, 1898	"	Starberry Point.	Lamont.	
3662	Eaton, Claude L.	May 16, 1898	"	Avoca.	Early.	
3690	Eckerman, H. F. L.	July 1, 1899	"	Orien.	Des Moines.	
3753	Eckerman, C. J.	October 1, 1899	"	Malvern.	Nebraska.	
3840	Evans, Paul W.	October 15, 1899	"	Iowa City.	South English.	Vinton.
3918	Euler, Frank	January 29, 1899	"	Gladbrook.		
3912	Elwood, James D.	August 5, 1899	"	Defiance.		
3928	Egler, Chas. O.	September 1, 1899	"	Onawa.		
4087	Egli, Eugene E.	March 24, 1891	"	Marshalltown.		
4070	Elder, A. T.	June 1, 1891	"	Tingley.		
4114	Elder, William E.	September 1, 1891	"	Marshalltown.	Waterloo.	
4165	Evans, Wilber H.	December 21, 1891	"	Webster.	Hedrick.	
4190	Eastburn, W. W.	March 1, 1892	"	Pilot Mound.	Des Moines.	
4188	Eade, J. W.	March 1, 1892	"	Essex.		
4221	Eaton, Harry E.	April 12, 1892	Graduate.			
4492	Ellerick, J. S.	July 14, 1893	By examination	Keosauqua.	Oskaloosa.	
4587	Elliot, George Fred.	November 8, 1893	"	Boone.		
4690	Evans, J. W.	April 10, 1894	"	Clinton.		
4644	Emerson, R. W.	April 20, 1894	"	Cedar Rapids.		
4694	Erb, B. F.	June 26, 1894	"	Cambridge.	Des Moines.	
4782	Edwards, J. E.	September 10, 1894	"	Eagle Grove.	Holmes.	
4811	Edwards, N. L.	February 6, 1895	"	Des Moines.	Dolliver.	
4887	Eckstein, E. J.	May 14, 1895	"	Chester.		
4964	Epperly, C. O.	December 17, 1895	"	Newell.	Glidden.	
5013	Easton, E. K.	March 8, 1896	"	Mason.	West Bend.	
5111	Everett, Orin.	July 7, 1896	"	Tama.	Marshalltown.	
5275	Elliot, F. H.	July 27, 1897	Graduate.	Defiance.	Fenton.	
5307	Elliot, A. V.	May 8, 1897	By examination	Akron.	Hawarden.	In South D.
5308	Engelhardt, C. P.	August 5, 1897	"	Krohnk.		
5381	Elliot, Alexander	October 5, 1897	"	Rhodes.		
5440	Evans, J. E.	April 6, 1898	"	Clearfield.	Mingo.	

No.	Name	Month	Year	By examination	Location
5441	Edwards, Fred C.	April	1893	By examination	Montron.
5442	Edman, Charles C.	August	1899	Graduate	West Liberty.
5443	Emree, George B.	August	1899	By examination	Des Moines.
5444	Engelme, Alva.	November	1899	Graduate	Des Moines.
5445	Engelme, Frank Wilbur.	October	1900	"	Davenport.
5446	Engels, Arno F.	November	1900	"	Buffalo.
5447	Enpelt, August	December	1900	"	Audubon.
5448	Erasmus, J. Victor	March	1901	By examination	Des Moines.
5449	Ersstrom, J. A.	July	1901	Graduate	Davenport.
5450	Ersmert, C. B.	August	1901	"	Des Moines.
5451	Ersland, H.	September	1901	"	Davenport.
5452	Engert, William B.	September	1902	"	Indianapolis.
5453	Eysaas, Ira E.	January	1902	By examination	Des Moines.
5454	Erickson, H. E.	February	1902	"	Harvey.
5455	Erickson, G. N. O.	August	1902	Graduate	Le Mars.
5456	Erickson, S. S.	August	1902	"	Little Sioux.
5457	Edlin, Sten R. L.	October	1902	"	Iowa City.
5458	Eriksson, David G.	October	1902	"	Des Moines.
5459	Elliot, W. J.	October	1902	By examination	Wall Lake.
5460	Ellert, Alfred H.	December	1902	"	Centerville.
5461	Elgin, J. F.	March	1903	Graduate	Oakaloosa.
5462	Engstrom, D. N.	April	1903	By examination	Roland.
5463	Eide, J. H.	July	1903	Graduate	Des Moines.
5464	Edwards, E. H.	August	1903	"	Dunlap.
5465	Edwards, Lee	August	1903	"	Mason City.
5466	Erickson, J. A.	October	1903	By examination	Defiance.
5467	Engleah, J. A.	October	1904	"	Adair.
5468	Eisenmiller, L. E.	February	1904	"	Des Moines.
5469	Eby, Robert.	February	1904	By examination	Ellsworth.
5470	Eberhart, L. E.	February	1904	Graduate	Burlington.
5471	Engelbrecht, H. J.	February	1904	By examination	Stonx City.
5472	Erwin, B. O.	August	1904	Graduate	Des Moines.
5473	Ely, R. L.	August	1904	"	Storm Lake.
5474	Elder, M. O.	October	1904	"	Des Moines.
5475	Eaton, J. B.	August	1904	"	Moravia.
5476	Ellsworth, W. F.	December	1904	"	Des Moines.
5477	Eastlack, W. C.	February	1905	"	Albia.
5478	Elliot, Robert.	June	1905	"	Humeaton.
5479	Ennis, L. E.	June	1905	"	Keokuk.
5480	Eason, J. R.	July	1905	As assistant	Redfield.
5481	Fuller, Charles M.	June	1890	As owner.	Minneapolis.
5482	Freed, David A.	June	1890	"	Dubuque.
5483	Flammant, M.	June	1890	As assistant	Elgin.
5484	Fraatz, Fred C.	June	1890	As owner	Jefferson.
5485	Finke, Walter H.	June	1890	"	Akron.
5486	Foy, Edward W.	June	1890	"	Shelby.
5487	Farnham, L. H.	June	1890	As assistant.	Jefferson.
5488	Fagan, Horace M.	July	1890	"	Shelby.
5489	Freeman, Edward O.	July	1890	"	Shelby.

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
1681	Fletcher, W. G.	July 27, 1890	By examination	Glenwood	Williamsburg.	
1751	Fox, Jacob G.	August 6, 1890	As owner	Waukegan	Mt. Vernon.	
1788	French, Charles H.	August 10, 1890	By examination	Cedar Rapids.		
1816	Finster, Henry J.	August 22, 1890	As owner	Steamboat Rock.		
1845	Fitzgerald, M.	September 15, 1890	By examination	Liscomb	Boone.	
1864	Frisa, Menzo	September 22, 1890	"	Aroca	Harlan.	
1895	Frost, C. E.	October 23, 1890	"	Oxford	Wapello.	
1925	Fellows, Henry	November 23, 1890	"	Colfax	Williams.	
1962	Fiddler, J. D.	November 14, 1891	"	Lavermore.	Clarion.	
2014	Frank, E. S.	March 1, 1891	"	Coon Rapids.	Cedar Rapids.	
2065	Foltz, George F.	September 23, 1891	"	Marshalltown.		
2112	Feenstra, J. B. H.	January 17, 1892	"	What Cheer.		
2318	Farney, C. M.	June 2, 1892	"	Parkersburg.		
2334	Forsyth, Robert.	February 2, 1893	"	Atlantic	Mystic.	
2344	Frecks, Ed M.	November 17, 1893	"	Sigonney.	George.	
3037	Findley, Will J.	June 24, 1894	"	Galva.	Sac City.	
3043	Franken, Ed.	August 6, 1896	Graduate			
3054	Farnsworth, D. W.	August 20, 1896	By examination	West Union.		
3152	Fisher, Lewis A.	February 25, 1897	"	Creston.		
3153	Foster, Horatio O.	February 25, 1897	"	Panora.	Prairie City.	
3166	Funk, Samuel G.	March 15, 1897	"	Lansing	Cedar Rapids.	
3210	Freeman, J. H.	April 5, 1897	"	Hampton.		
3229	Fowler, I. D.	April 17, 1897	"	Clarksville	California.	
3251	Funk, Edgar M.	May 24, 1897	"	Glidden.	Scranton.	
3263	Fulton, John L.	June 21, 1897	"	Lenox	Clearfield.	
3335	Foster, F. E.	September 18, 1898	"	Bentonsport.	North English.	
3365	Fritz, William I.	December 4, 1898	"	Thurman	Farmington.	
3530	Foster, Thos. M.	January 15, 1899	"	Columbus City	Louisville, Neb.	
3563	Franka, S. C.	April 9, 1899	"	Cumberland	Mediapolis.	
3633	Frater, George W.	April 9, 1899	"	Viele.	Massena.	
3653	Flah, H. T.	November 19, 1899	"	Clarksville	Illinois.	
3770	Fee, Frank C.	February 18, 1890	"	By examination.	West Superior, Wis.	
3831	Frizelle, C. H.	April 18, 1890	"	Nevada	Paulina.	
3890	Fulton, Levi R.	April 19, 1890	"	What Cheer	Redfield.	
3959	Fulton, James T.	September 20, 1891	"	Wilton Junction.		
4035	Forsythe, James O.	April 8, 1891	"			
4045	Farner, Rudolph.	May 8, 1891	"			
4050						

Thompson.	Decorah.	Graduate	1891
Baxter.	Collins	By examination.	August
Monona.	McGregor	"	July
	Riversville.	"	August
Jolley.	Newton	"	August
	Myrica	"	December
	Wadena	"	December
	Dubuque	"	May
Titonka.	Clinton	"	May
	Ft. Dodge	"	August
Joico.	Onawa	"	September
	Gilmore City	"	November
Pocahontas.	Newton	"	February
	Des Moines	"	February
Milo.	Des Moines	"	April
Atlantic.	Toledo	"	April
Cedar Rapids.	Hamburg	"	April
Nebraska.	Hamborn	"	April
Rowan.	Reinbeck	"	June
Wilton Junction.	Anita.	"	September
Osage.	Belmond	"	January
Dows.	Des Moines	"	January
Idaho.	Manson.	"	February
	Oakland	"	March
Atlantic.	Newell	"	March
	Sumner.	As assistant	March
Charles City.	Dubuque	By examination.	October
Tama.	Tipton	"	November
Villisca.	Creston	"	December
Sumner.	Etma.	"	December
Vincent.	Ft. Dodge	"	May
	Burlington.	"	February
Perry.	Scranton	"	February
	Humeston.	"	February
	Waukegan.	"	September
Baxter.	Waukegan	"	March
	Clarksville	Graduate.	February
Dubuque.	Guttenburg	"	February
	Maxwell	"	March
	Des Moines.	"	March
	What Cheer.	"	May
	Osgoe	"	July
Fosterlo.	Waterloo	By examination	July
	Rodney	"	July
	Centerville	Graduate	July
Humeston.	Centerville	"	August
Duncombe.	Des Moines	By examination	October
Adel.	Dexter	"	November
Atlantic.	Des Moines	By examination	December
	Des Moines	Graduate.	December
	Myrica	By examination	February
		"	March

## ABSTRACT—CONTINUED.

Rank and number of order	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
8018	Fulton, P. Mack M.	May 1, 1900	Graduate.	Abron	.....	In South Dakota
8028	Frans, Clarence P.	June 2, 1900	"	Farmington.	.....	
8029	Fransworth, Ambrose H.	August 5, 1900	"	Des Moines.	Page, Neb.	
8135	Fritz, Earl G.	September 2, 1900	By examination	Des Moines.	Leup.	
8136	Flores, Bert G.	October 9, 1900	Graduate.	Kelpton.	Humboldt.	
8138	Flores, Anna M.	November 6, 1901	"	Des Moines.	.....	
8273	Farrall, Anna M.	August 6, 1901	"	Winthrop.	.....	
8274	Fisher, E. C.	October 7, 1901	"	Des Moines.	Des Moines.	In Nebraska.
8477	Ford, Joseph N.	November 7, 1901	By examination	Logan.	.....	
8478	Flamant, A. M.	December 8, 1901	Graduate.	Mescal.	Council Bluffs.	
8483	Farmer, E. E.	January 6, 1902	"	Dallas Center.	Washington.	
8513	Fenne, L. N.	April 1, 1902	"	Mapleton.	.....	
8515	Ford, L. T.	April 1, 1902	"	Ottumwa.	.....	
8522	Findlay, C. E.	April 1, 1902	By examination	Grinnell.	.....	
8523	Ferguson, A. E.	April 1, 1902	"	Des Moines.	.....	In Nebraska.
8524	Ferguson, A. E.	June 8, 1902	"	Des Moines.	.....	In Illinois.
8525	Ferking, Edgar	June 8, 1902	"	Fairfax.	.....	
8710	Fenney, John F.	June 20, 1902	Graduate.	Krohn.	.....	In Illinois.
8715	Fry, Herbert J.	October 7, 1902	"	Des Moines.	Waterloo.	
8824	Ferris, Hugh C.	October 7, 1902	"	Des Moines.	Cedar Rapids.	
8825	Fisher, H. C.	October 22, 1903	Graduate.	Delia.	Dolliver.	
8826	Fiedgartherer, J. J.	April 5, 1903	"	Dubuque.	.....	
7005	Fredrickson, Walter E.	May 2, 1903	By examination	Ottumwa.	.....	In Illinois.
7011	Felcher, A. W.	July 1, 1903	Graduate.	Hawarden.	.....	In California.
7053	Ferriss, E. A.	August 2, 1903	"	Des Moines.	.....	In Illinois.
7059	Felker, W. A.	August 4, 1903	"	Waterloo.	Greenville.	In Pennsylvania.
7111	Frank, G. A.	August 4, 1903	"	Royal.	.....	
7112	Frank, G. A.	August 4, 1903	"	Mason City.	.....	
7146	Frank, G. A.	August 4, 1903	"	Audubon.	.....	
7302	Forsyth, A. E.	October 6, 1903	By examination	Delta.	Cedar Rapids.	In Illinois.
7303	Frick, D. A.	December 1, 1903	"	Des Moines.	.....	
7350	Fisher, Elmer	February 2, 1904	Graduate	Rome	.....	In Nebraska
7351	Fosbender, Edna	February 2, 1904	"	Des Moines.	.....	
7352	Freeman, H. C.	February 2, 1904	"	Des Moines.	.....	
7353	Flickenstein, A.	February 2, 1904	By examination	Anthorn.	.....	
7354	Flickenstein, D.	June 7, 1904	"	Clinton.	Lanesboro.	
7355	Fox, A. W.	June 7, 1904	"	Clinton.	.....	

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## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
3945	Graham, Ed L.	July 24, 1899	Graduate	Muscate.		
3711	Goodwin, F. L. B.	August 20, 1899	By examination	Malvern	Pacific Junction.	
3760	Graham, Robert D.	October 20, 1899	"	Strawberry Point	Greely	
3922	Gill, Bert A.	February 8, 1899	"	Springdale	West Branch.	
3928	Grant, Charles S.	February 8, 1899	"	Iowa City	Riverside	
3900	Green, Samuel W.	June 19, 1899	"	Janesville	Ewing, Nebraska.	
3911	Graham, H. A.	July 18, 1899	"	Eldon	Ottumwa.	
3954	Graft, J. E.	October 31, 1899	"	Carson	Des Moines.	
4001	Glen, A. A.	March 8, 1899	"	Lohrville	Noblesville, Indiana.	
4021	Gardner, George H.	March 17, 1899	Graduate	Des Moines	Perry.	
4072	Grimm, A. L.	June 17, 1899	By examination	Tracer	Wankon.	
4115	Gangsted, S. M.	September 1, 1899	"	Bode.	Des Moines.	
4129	Gibson, R. M.	October 6, 1899	"	Bloomfield	Clinton.	
4160	Galbraith, Samuel	January 5, 1892	"	Hull	Coin.	
4178	Gaus, Michael	February 2, 1891	"	Shenandoah		
4189	Graham, Will A.	February 20, 1892	"	Des Moines.		
4208	Gregg, Finley K.	March 22, 1892	"	Iowa City	Tipton.	
4274	Gressler, F. J.	July 18, 1892	"	Adair	Oelwein.	
4285	Gose, K. E.	August 4, 1892	Graduate	Beacon	Lucas.	
4302	Groneman, F. C.	September 6, 1892	By examination	Pleasantville	Bussey.	
4316	Graves, Edwin H.	October 7, 1892	"	Whittemore	St. Paul.	
4376	Gibbeart, H. E.	February 4, 1893	"	Ame.		
4401	Gregory, Frank E.	March 15, 1893	"	Mechanicville.		
4448	Gerboth, Edward J.	May 5, 1893	Graduate	Sioux City	Cedar Rapids.	
4449	Gallagher, Joe	May 5, 1893	By examination	Sheldon	Le Mars.	
4477	Griffin, H. M.	June 20, 1893	"	Fort Dodge		
4478	Grimm, G. Adolph	June 20, 1893	"	Dubuque	Owassa.	
4496	Guthrie, Fred L.	July 5, 1893	"	Mapleton	Cumberland.	
4518	Griffin, Charles F.	August 8, 1893	"	Troy	Ohio.	
4520	Gordunior, Lilo.	March 24, 1894	"	Cherokee	Evanston, Ill.	
4621	Garrett, J. M.	April 1, 1894	"	Fairbank	Nevada.	
4649	Gregg, Fred W.	May 7, 1894	"	Hawarden	Iowa Falls.	
4676	Gill, Vincent F.	June 5, 1894	"	Geneva		
4704	Graves, Alva V.	August 6, 1894	"	Lotts.		
4709	Gregory, F. W.	October 2, 1894	"			
4745	Grippe, L. U.					In Michigan.

4761	Gurnsey, J. J.	May	2, 1893	By examination	Bloomfield.	Stour City.
4777	Garey, C. E.	November	13, 1894	"	Marshalltown	
4799	Graves, F. H.	January	12, 1895	"	Madrid.	West Union.
4833	Green, Schuyler E.	March	6, 1895	"	Anamosa.	Chicago.
4866	Gibbins, A. S.	April	2, 1895	"	Manchester.	
4878	Goodwin, Clarence G.	May	0, 1895	"	Javerne.	
4920	Graham, J. W.	August	9, 1895	"	Early.	Kirkman.
4931	Gregerson, James.	September	17, 1895	"	Elarian.	
4943	Girard, R. A.	October	7, 1895	"	Gladbrook.	
4960	Glynn, T. E.	January	7, 1896	"	Cascade.	
4982	Gelman, N. E.	February	7, 1896	"	Haverhill.	Colfax Wash.
4993	Grady, George L.	February	7, 1896	"	Bedford.	Clarinda.
5007	Grant, B. W.	April	7, 1896	"	Kedricksburg.	Manchester.
5011	Grans, B. M.	April	17, 1896	"	Waterloo.	Missouri.
5045	Grasgow, J. W.	April	7, 1896	"	Ocheyedan.	Melvin.
5068	Goodenow, N. H.	May	5, 1896	"	Washington.	
5093	Goodman, E. H.	May	5, 1896	"	Wadingine.	
5102	Graham, J. S.	September	1, 1896	"	Manning.	Soranton.
5126	Gray, H. E.	February	2, 1897	"	Kennett.	
5198	Grander, L. F.	June	1, 1897	"	Blairsburg.	South Dakota.
5294	Grigg, M. F.	June	7, 1897	Graduate	Murray.	Des Moines.
5300	Gerlach, Richard.	August	2, 1897	"	Cherokee.	Carroll.
5301	Gandrup, A. W.	August	3, 1897	"	Story City.	Laurel.
5309	Gould, L. L.	August	8, 1897	By examination	Grinnell.	Gilman.
5373	Gamble, C. A.	December	7, 1897	"	Knoxville.	Ames.
5377	Gunn, George W.	January	4, 1898	"	Centerville.	
5407	Green, O. J.	March	1, 1898	"	Fairbank.	Oelwein.
5408	Grafunder, C. L.	March	1, 1898	"	Webster City.	Carlisle.
5425	Gowen, C. B.	March	1, 1898	"	Sumner.	Westgate.
5429	Gaylord, C. M.	March	1, 1898	"	Mason City.	Charles City.
5448	Gregory, C. W.	April	5, 1898	"	Iowa Falls.	Goldfield.
5478	Gale, W. S.	April	5, 1898	"	Monkton.	Milton.
5486	Gearhart, N. A.	April	31, 1898	Graduate	Hopkinton.	
5492	Graves, O. L.	May	8, 1898	By examination	Ledyard.	
5498	Guth, Theodore J.	May	8, 1898	"	Des Moines.	Wyoming.
5532	Gilmore, Mary E.	August	8, 1898	Graduate	Vinton.	Minnesota.
5533	Gantz, Frank.	August	8, 1898	"	Burlington.	
5539	Gandrup, H. D.	August	8, 1898	"	Story City.	
5571	Goesman, A. T.	September	6, 1898	By examination	Alta Vista.	Seattle.
5603	Gilmore, H. N.	December	6, 1898	"	Vinton.	
5604	George, R. E.	December	6, 1898	"	Colo.	St. Anthony.
5615	Cles, Grant.	January	3, 1899	Graduate	Stiles.	
5703	Goodrich, W. W.	January	3, 1899	By examination	Des Moines.	Early
5708	Glaze, A. H.	January	1, 1899	"	Buffalo Center.	
5790	Green, Arno.	January	1, 1899	"	Lake Park.	Ogden.
5846	Gance, Francis W.	August	1, 1899	Graduate	Manning g.	
5854	Grau, G. H.	November	9, 1899	By examination	Havelock.	Terril.
5897	Gill, W. H.	January	2, 1900	"	Monkton.	
5914	Gale, Winfred I.	February	6, 1900	"		

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5947	Gause, E. F.	March 6, 1900	"	Shenandoah.		
5948	Griffith, J. E.	March 6, 1900	"	Audubon.		
5949	Grubbs, A. B.	April 1, 1900	"	Oto	Eagle Grove.	
6002	Grover, Robert Oswald.	May 1, 1900	Graduate	Central City	Pocahontas.	
6079	Grenier, Archille B.	July 7, 1900	"	Des Moines.		
6104	Gross, August G.	August 7, 1900	"	Harley	Parkersburg.	
6117	Getz, Jno. W.	September 2, 1900	"	Grand Junction	Laneboro.	
6182	Gray, R. O.	October 2, 1900	By examination	George	Sargeants Bluff.	
6184	Garnum, Orin W.	October 2, 1900	"	Macon City	Titonka.	
6226	Gillman, Geo. W.	December 4, 1900	Graduate	Des Moines.		In Illinois.
6240	Gietty, F. J.	February 5, 1901	By examination	Fort Dodge.		
6241	Gitzendanner, Herman.	March 5, 1901	"	Edgewood	Parkersburg.	
6244	Greve, J. H.	March 5, 1901	"	New Hampton.	Charles City.	
6245	Gilham, Warren B.	March 5, 1901	"	Marne	Anita.	
6251	Givens, E. Eugene.	April 2, 1901	"	Radcliffe	Albert City.	
6256	Groves, James O.	April 7, 1901	Graduate	Des Moines.	Dubuque.	
6277	Grensel, Charles N.	May 7, 1901	"	Decorah	Minnesota.	
6300	Gates, Roy H.	May 7, 1901	"	Sionx City	Nebraska.	
6306	Garnant, Lon.	May 7, 1901	By examination	Waterloo.		
6308	Gruener, W. J.	May 7, 1901	"	Cedar Rapids.		
6320	Glendinning, Geo. H.	May 7, 1901	"	Des Moines.		
6380	Gardner, C. L.	June 4, 1901	Graduate	Decorah	Arlington, S. D.	
6412	Green, Arthur L.	August 2, 1901	"	Des Moines.	Centerville.	
6515	Gammill, Willard.	October 6, 1901	"	Leon	Newhall.	
6540	Geddes, Mamie C.	January 4, 1902	"	Des Moines.	Grand River.	
6560	Goodwin, Clayton E.	February 4, 1902	"	Washita	Washington.	
6603	Goodall, John A.	March 1, 1902	"	Council Bluffs		In Indiana.
6681	Gaumer, J. E.	April 6, 1902	By examination	Iowa City	South Dakota.	
6683	Griffith, Geo. C.	May 6, 1902	"	What Cheer	Lone Rock.	
6696	Gill, Harvey J.	May 8, 1902	Graduate	Dubuque	Ames.	
6700	George, A. B.	June 8, 1902	"	Des Moines.		Indiana.
6729	Gilchrist, T. L.	July 8, 1902	By examination	Lake View		Nebraska.
6735	Glaister, J. J.	July 8, 1902	"	Ponda		South Dakota.
6767	Gastner, S. E.	August 5, 1902	Graduate	Des Moines.		In Texas.
6768	Gerard, H. H.	August 5, 1902	"	Beecon		
6790	Grimm, Frank H.	August 5, 1902	By examination	Dubuque	Rolle.	Wisconsin.

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## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
661	Hovey, H. W.	June 24, 1880	As assistant	Independence.	Sioux City.	Nebraska.
774	Hope, George T.	June 4, 1880	As owner	Little Sioux		
795	Haman, George O.	June 29, 1880	"	Cedar Rapids.		
911	Horne, John	June 2, 1880	"	Mount Ayr.		
1071	Hovenstein, W. M.	June 6, 1880	"	Parkersburg.		
1180	Haegle, H. W.	June 10, 1880	As assistant	Des Moines.		
1185	Hanson, E. M.	June 7, 1880	As owner	Sioux City.		
1196	Hopper, E. M.	June 14, 1880	"	Springville.		
1280	Hopwood, A. L.	June 8, 1880	"	Jinton.		
1319	Hanna, John W.	June 23, 1880	"	Winfield.		
1478	Houghton, F. E.	July 20, 1880	"	Adel.	Des Moines.	
1518	Hansen, H. C.	July 23, 1880	As assistant	Burlington.	Grand Junction, Ool.	
1559	Henry, George O.	July 23, 1880	"	Des Moines.	Hawarden.	
1586	Haskell, George R.	August 4, 1880	By examination	Bellevue.		
1687	Harlan, Charles E.	August 4, 1880	"	Des Moines.		
1689	Hanner, Alfred.	August 10, 1880	"	Des Moines.		
1696	Harris, J. L.	August 31, 1880	"	Ottumwa.		
1722	Harris, T. C.	July 31, 1880	As owner	Barnett.		
1724	Helen, Rudolph.	September 9, 1880	"	Kebek.		
1791	Herrick, John.	September 17, 1880	"	Sioux.		
1892	Hayla, David D.	September 17, 1880	By examination	Cambridge	Riverton.	
2008	Hall, George W.	August 25, 1880	As owner	Haward		
2038	Hall, Solon G.	October 25, 1880	By examination	West Side.	Alta.	
2058	Hays, William W.	December 23, 1881	"	Scranton.	Guthrie Center.	
2066	Hane, James H.	February 23, 1881	"	Cherokee.	Mitchellville.	
2201	Henderson, H. C.	February 15, 1881	"	Gilman.	Sioux City.	
2304	Horton, Frank A.	July 15, 1881	"	Des Moines.	Rock Rapids.	
2343	Hanner, A. G.	August 11, 1881	Graduate	Stanton.		
2348	Hino, Charles W.	November 25, 1882	By examination	Clinton.		
2417	Huston, J. T.	April 21, 1882	"	Clarinda.		
2461	Hite, Robert B.	May 8, 1882	"	Strawberry Point.	Buxton.	
2466	Hoag, Ed. H.	July 8, 1882	"	Rose Hill.		
2540	Henderson, J. B.	October 17, 1882	"	Colo.		
2649	Hosetier, J. I.	December 1, 1882	"	Dyersville.	Waterloo.	
2650	Holbrook, G. A.	February 10, 1883	"	West Branch.	Clarinda.	
2655	Henderson, W. A.	March 6, 1883	"	Maynard.		
2648	Hance, George W.	June 6, 1883	"			

2835	Hayes, J. W.	July	8, 1888	By examination	Des Moines.	Cedar Rapids.	In North Dakota.
2865	Howey, Frank.	July	27, 1888	.....	Fort Dodge.	Ottamwa.	.....
2704	Holtzschuler, O.	November	28, 1888	.....	Oregon.	Alta.	.....
2709	Hadden, D. E.	December	18, 1888	.....	Le Mars.	Greenwood.	.....
2715	Hove, A. J.	January	20, 1889	.....	Greenfield.	Des Moines.	.....
2744	Hugg, A. A.	May	6, 1884	.....	Oskaloosa.	Neola.	.....
2768	Hampton, R. B.	July	18, 1884	.....	West Liberty.	Breda.	.....
2780	Hampton, George R.	July	20, 1884	.....	Runnells.	Dysart.	Whitewood, S.D.
2804	Hoag, E. L.	September	8, 1884	.....	Tama City.	Osceola.	.....
2807	Higley, W. H.	February	7, 1885	.....	Storm Lake.	(Osceola only.)	.....
2904	Hummel, M.	June	4, 1885	.....	Grundy Center.	Corning.	.....
2906	Hamilton, R. G.	August	4, 1885	.....	Osceola.	Burt.	.....
2907	Hill, F. M.	October	14, 1885	.....	Fairfield.	.....	.....
3001	Hampson, James C.	June	18, 1885	.....	Franklin.	.....	.....
3078	Henry, Chas.	September	14, 1886	.....	Lake City.	.....	.....
3089	Hall, Lincoln.	October	14, 1886	.....	Muscatine.	.....	.....
3110	Haverkamp, J. J.	December	21, 1886	.....	Winfield.	.....	.....
3180	Hubbard, J. O.	February	24, 1887	.....	Amos.	.....	.....
3193	Huston, J. E.	February	24, 1887	.....	Guthrie.	.....	.....
3195	Howard, C. R.	March	14, 1887	.....	Fort Dodge.	.....	.....
3200	Lech, W. H.	March	16, 1887	.....	Maya Falls.	.....	.....
3218	Kunze, James S.	May	10, 1887	.....	Hampden.	.....	.....
3230	Kudsel, George M.	April	19, 1887	.....	Osceola.	.....	.....
3245	Kline, J. B.	April	17, 1887	.....	Streator.	.....	.....
3288	Kass, Fred.	May	6, 1887	.....	Streator.	.....	.....
3340	Kearney, Arthur B.	September	30, 1887	.....	Streator.	.....	.....
3347	Kellett, Arthur.	October	28, 1887	.....	Streator.	.....	.....
3352	Kellogg, E. O.	November	15, 1887	.....	Streator.	.....	.....
3357	Kellogg, Thomas M.	December	17, 1887	.....	Streator.	.....	.....
3374	Hardy, Rufus L.	December	20, 1887	.....	Streator.	.....	.....
3384	Hagelick, A. E.	February	7, 1888	.....	Streator.	.....	.....
3420	Husted, D. W.	February	15, 1888	.....	Streator.	.....	.....
3421	Henderson, E. L.	March	20, 1888	.....	Streator.	.....	.....
3431	Horne, T. E.	March	20, 1888	.....	Streator.	.....	.....
3460	Huff, T. O.	April	8, 1888	.....	Streator.	.....	.....
3464	Higgin, J. W.	April	15, 1888	.....	Streator.	.....	.....
3498	Hamm, E. C.	May	31, 1888	.....	Streator.	.....	.....
3539	Hippley, J. J.	May	7, 1888	.....	Streator.	.....	.....
3615	Hoffman, Charles F.	August	6, 1889	.....	Streator.	.....	.....
3640	Howland, G. W.	September	6, 1889	.....	Streator.	.....	.....
3659	Hunter, J. P.	March	21, 1889	.....	Streator.	.....	.....
3674	Horseman, T. O.	April	10, 1889	.....	Streator.	.....	.....
3677	Horseman, J. L.	May	15, 1889	.....	Streator.	.....	.....
3692	Hofer, A. E.	June	16, 1889	.....	Streator.	.....	.....
3705	Hall, L. G.	July	16, 1889	.....	Streator.	.....	.....
3713	Harrison, J. C.	August	16, 1889	.....	Streator.	.....	.....
3718	Holmes, W. L.	August	20, 1889	.....	Streator.	.....	.....
3748	Hervey, Chas. B.	September	8, 1889	.....	Streator.	.....	.....
		November	9, 1889	.....	Streator.	.....	.....

## ABSTRACT—CONTINUED.

Number of cer- tificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
3756	Hunt, Homer	October 16, 1889	By examination.	Clinton.....	Camanche.	
3774	Snufford, W. S.	December 8, 1889	"	Iama.....	Des Moines.	
3785	Haeleach, John A.	December 16, 1889	"	Ottumwa.....	Bloomfield.	
3806	Hendrix, N. T.	January 26, 1890	"	Letts.....	Columbus Junction.	
3807	Herley, George F.	January 28, 1890	"	Rockwell.....	Emmetsburg.	
3845	Bill, Olin E.	March 11, 1890	"	Clinton.....	Oxford Junction.	
3851	Honak, Miss Lillian	March 18, 1890	"	"	Missouri Valley.....	
3852	Bull, Frank B.	March 18, 1890	"	"	Des Moines.....	
3853	Hagan, James H.	March 18, 1890	"	"	Rockwell City.....	
3871	Hews, R. H.	April 8, 1890	"	"	Mt. Ayr.....	
3876	Hunter, Fred.	April 15, 1890	"	"	Manning.....	
3879	Hilsabeck, E. F.	April 17, 1890	"	"	Waterloo.....	
3886	Henderson, C. B.	April 28, 1890	"	"	Grinnell.....	
3889	Hedgess, Miss Flo L.	June 10, 1890	"	"	Bridgewater.....	
3899	Herbert, Frank	July 7, 1890	"	"	Marengo.....	
3843	Hunrickhouse, J. M.	October 7, 1890	"	"	Ft. Dodge.....	
3875	Baird, Will W.	January 18, 1891	"	"	Minburn.....	
3977	Harris, W. W.	January 22, 1891	"	"	Waterloo.....	
4006	Hoff, J. A.	March 7, 1891	"	"	Maxwell.....	
4009	Hochstetter, B. F.	March 7, 1891	"	"	Des Moines.....	
4018	Hommann, Richard	March 7, 1891	"	"	New Market.....	
4016	Hunt, A. V.	March 18, 1891	"	"	Leon.....	
4026	Honnold, F. J.	April 7, 1891	"	"	Washington.....	
4034	Henderson, James M.	April 16, 1891	Graduate	"	Wesley.....	
4064	Heal, Frank	May 8, 1891	"	"	Dubuque.....	
4060	Haas, Daniel J.	May 20, 1891	"	"	Burlington.....	
4066	Harman, John	June 2, 1891	"	"	Grundy Center.....	
4080	Hummel, Charles C.	June 16, 1891	"	"	Lamont.....	
4095	Hoffman, G. W.	June 30, 1891	"	"	Bellevue.....	
4111	Hornor, Miss K. Z.	August 20, 1891	"	"	Dexter.....	
4129	Hingston, Nick J.	October 28, 1891	By examination.	"	Nora Springs.....	
4134	Hindorf, A. E.	November 2, 1891	"	"	Belmond.....	
4142	Henry, W. P.	November 17, 1891	"	"	Klemme.....	
4153	Hart, John L.	November 17, 1891	"	"	Saifield.....	
4150	Hufford, Ed H.	December 1, 1891	"	"	Mitchellville.....	
4137	Hilde, G. B.	December 10, 1891	"	"	Jewell Junction.....	
4167	Hamerker, G. E.	January 20, 1892	"	"	"	In Washington.

4195	Harlan, Oron O.	March	3, 1892	By examination	Storm Lake.		
4204	Henning, William E.	March	24, 1893	"	Clinton		
4211	Hackett, C. W.	April	5, 1893	"	Des Moines		
4223	Haynes, Charles E.	March	8, 1893	"	Oakaloosa		Bode.
4226	Henderson, H. J.	May	3, 1892	"	Williamsburg		Knoxville.
4234	Hughes, Ralph E.	May	10, 1892	"	Lansens		Colorado.
4236	Holstead, B. Alice	July	1, 1892	Graduate	Muscatine		Swaledale.
4237	Holbeck, T. M.	July	1, 1892	By examination	Manilla		
4243	Hazlett, John C.	July	5, 1892	"	Muscatine		Thayer, Neb.
4247	Hood, E. J.	July	12, 1892	"	Clare		
4250	Henry John W.	August	4, 1892	Graduate	Greeley		Strawberry Point.
4254	Hamler, W. A.	August	2, 1892	By examination	Atlantic		Terril.
4267	Holman, J. W.	August	2, 1893	"	Rockwell		Guthrie Center.
4268	Harrison, J. W.	August	26, 1892	"	Ang		
4268	Holland, John E.	September	6, 1892	"	St. Pleasant		
4267	Harrison, Fred W.	October	1, 1892	"	Kumston		Fairfield.
4271	Hogland, F. T.	November	1, 1892	"	Nora Springs		
4285	Hitchinson, J. A.	January	8, 1893	"	Yuro		
4288	Holmes, George	January	10, 1893	"	Marshtown		
4293	Hermanson, T. P.	March	7, 1893	"	Goldfield		Cedar Rapids.
4298	Hoon, Grant W.	March	7, 1893	"	Tipon		Roland.
4310	Huffman, G. E.	March	18, 1893	"	Burlingame		Stanwood.
4324	Hursh, Will T.	March	23, 1893	Graduate	Des Moines		Minnesota.
4330	Hurlbut, J. R.	April	4, 1893	By examination	Des Moines		South Dakota.
4331	Hurrod, H. D.	June	6, 1893	"	Des Moines		
4340	Hamilton, L. C.	June	23, 1893	"	Montana		Des Moines.
4344	Hedley, John E.	July	5, 1893	"	Clinton		
4352	Hammer, C. H.	August	9, 1893	"	Dubuque		
4355	Held, William	December	8, 1893	"	Havardien		
4373	Hieber, Louis O.	February	8, 1894	"	Burlington		
4376	Hieb, Louis O.	February	6, 1894	"	Trar		
4384	Hart, W. E.	February	6, 1894	"	Stout City		Cedar Falls.
4384	Haygarth, W. W.	March	6, 1894	"	Ruthven		West Side.
4384	Hills, F. N.	March	6, 1894	"	Clinton		Mason City.
4384	Holt, Edward S.	April	8, 1894	"	Clarion		
4384	Hildesheim, Jacob J.	April	17, 1894	"	Atamosa		Cedar Rapids.
4390	Holmes, E. M.	May	1, 1894	"	Alton		
4391	Holmes, E. M.	May	1, 1894	"	Chancey		Clinton.
4397	Hughes, Edward J.	June	5, 1894	"	Elliot		Imogene.
4397	Henderson, Harry H.	July	8, 1894	"	Mystic		Dixon, Mo.
4400	Harriman, J. E.	September	4, 1894	"	Waterloo		
4423	Hamilton, Ralph C.	September	2, 1894	"	Hampton		
4424	Hay, Andrew W.	October	2, 1894	"	Keota		
4432	Hafner, F. F.	October	2, 1894	"	Cedar Falls		Sioux City.
4437	Hill, F. S.	December	8, 1894	"	Sigourney		
4437	Harris, Lewis O.	December	15, 1894	"	Oelwein		
4437	Henry, Wilbur J.	May	16, 1893	"	Des Moines		David City, Neb.
4481	Helgeson, P. A.	March	23, 1893	"	Winterset		
4484	Hanske, Ed A.	March	5, 1893	"	Lake Mills		
4484	Hintz, Louis W.	March	20, 1893	"	Bellevue		
4490		March	20, 1893	"	Boone		

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
4854	Hall, A. P.	March	By examination	Blockton	Knoxville.	
4873	Hause, J. G.	May	"	Atton	Oceola.	
4896	Hack, Leon D.	June	"	Humboldt	Livermore.	
4900	Heitberger, Mathew G.	July	"	Akeley	Grundy Center.	
4939	Heitzinger, P. B.	July	"	Hamburg	Emerson.	
4932	Heupel, F. C.	September	"	Clinton	Laporte, Ind.	
4931	Heath, Lawrence	December	"	Kassena	Bridgewater.	
4939	Harrod, L. E.	January	Graduate	Des Moines		
4970	Halbert, Cora O.	January	By examination	Mapleton	Elliott.	
4973	Halden, J. F.	January	"	Delta	.....	
4983	Harvey, E. W.	January	"	Watkins	.....	
4991	Hilly, H. D.	February	"	Logan	Garrison	In Colorado.
4994	Hesse, R. C.	February	"	Elliott	Missouri Valley.	
4998	Hess, Will D.	February	"	Logan	Atlantic.	
5001	Hallowell, J. E.	February	"	Sacredonia	.....	
5002	Hilton, J. E.	March	"	Struble	.....	
5003	Hilton, Charles, Jr.	March	"	St. Paul	Sioux City.	
5003	Haag, A. M.	April	Graduate	Boeington	Pleasanton.	
5003	Hagbeek, W. H.	April	By examination	Lyons	Lake Park.	
5006	Hinschfeldt, Frank	May	"	Lyons	.....	
5009	Hannum, W. J.	May	"	Early	Marathon.	
5104	Hamilton, Wm.	June	"	Boone	.....	
5104	Hunter, E. G.	July	"	Eldora	Winterest.	
5120	Hinton, H. F.	August	"	Sioux City	ymouth.	
5120	Havstad, Oliver	August	"	Sioux City	.....	
5130	Horton, C. D.	September	"	Ft. Atkinson.	.....	
5130	Hatselstad, M. L.	October	"	Radcliffe	.....	
5131	Hummel, J. F.	October	"	Grinnell	.....	
5132	Hedgess, Grace L.	October	"	Des Moines	.....	
5133	Hansch, Harry H.	January	"	Greenfield.	.....	
5206	Harper, J. A., Jr.	February	"	Clinton	Nevada.	
5215	Hartman, C. P.	March	"	Strawberry Point.	.....	
5214	Henry, A. L.	March	"	Storm Lake	.....	
5227	Higley, L. E.	March	"	.....	.....	Hot Springs, S. D.

5385	Harris, H. H.	April	6, 1897	By examination.	Carroll.	Corning.	Nebraska
5386	Hastings, W. C.	May	4, 1897	"	Ruthven	"	"
5378	Huet, O. C.	May	4, 1897	"	Cedar Rapids.	"	"
5310	Harrison, Barton Z.	August	3, 1897	"	Oakland	Lorimer.	"
5311	Hirons, W. P.	August	3, 1897	"	Early.	"	"
5321	Hood, T. R. W. M.	September	7, 1897	"	Clare.	St. Ansgar.	"
5322	Hambleton, W. M.	September	7, 1897	"	Marshalltown.	Melbourne.	"
5349	Hieber, Benjamin.	November	9, 1897	"	Cedar Falls.	Hopkins, Missouri.	"
5401	Hedinger, Edward	February	1, 1898	"	Corning.	"	"
5411	Hemenway, J. R.	March	1, 1898	"	Dows.	Centerville.	"
5413	Herner, L. O.	March	1, 1898	"	Ottumwa.	Leadville, Colorado.	"
5430	Holt, N. B.	March	1, 1898	"	Ottumwa.	"	"
5438	Halloran, E. M.	April	1, 1898	"	Pumout.	"	"
5396	Hoyt, A. L.	April	1, 1898	"	Popejoy.	Dows.	"
5354	Hall, C. E.	July	1, 1898	"	Eagle Grove.	"	So. Dakota.
5373	Hays, W. S.	August	6, 1898	Graduate.	Centerville.	"	"
5351	Harrison, J. J.	September	4, 1898	By examination.	Westside.	"	In Nebraska.
5364	Henning, A. P.	October	4, 1898	"	Newell.	"	"
5301	Hubbert, F. F.	November	6, 1898	"	Malcom.	Des Moines.	"
5344	Huggins, E. A.	December	7, 1898	Graduate.	"	"	"
5353	Harscock, L. M.	January	6, 1899	"	Des Moines.	"	"
5393	Hays, S. O.	March	7, 1899	Graduate.	Clarion.	"	"
5392	Hieber, H. G. H.	April	4, 1899	"	Pringle.	"	"
5397	Hauptman, John.	April	4, 1899	"	Cedar Falls.	"	"
5397	Hauptman, John.	May	6, 1899	"	Council Bluffs.	"	In Montana.
5397	Halden, W. R.	May	6, 1899	By examination.	Des Moines Bluffs.	Union.	In Montana.
5704	Henry, J. I.	May	2, 1899	Graduate.	Council Bluffs.	"	In So. Dakota.
5705	Henry, E. L.	June	3, 1899	"	Hawarden.	"	"
5722	Haswell, J. W.	July	6, 1899	"	Mt. Pleasant.	"	"
5729	Hoyer, M. F.	July	6, 1899	"	Oelwein.	"	"
5740	Hamilton, J. V.	July	6, 1899	By examination.	Carroll.	Chicago, Ill.	"
5760	Horn, Charles C.	August	1, 1899	Graduate.	Winterset.	Strawberry Point.	"
5391	Hoffman, F. B.	August	1, 1899	"	Ottumwa.	Boone.	In Oklahoma.
5397	Halbert, C. B.	September	3, 1899	By examination.	Elliott.	"	"
5391	Hill, Merton J.	October	3, 1899	"	Churidan.	"	"
5390	Haire, John, Jr.	October	3, 1899	"	Ft. Dodge.	"	"
5395	Hag, Lyman N.	November	3, 1899	Graduate.	Blanchard.	Marshalltown.	"
5397	Hoover, George D.	December	5, 1899	"	Bayard.	Des Moines.	"
5379	Hansen, Charles.	December	5, 1899	By examination.	Atlantic.	Audubon.	"
5393	Hansen, A. Ross.	January	2, 1900	Graduate.	Des Moines.	"	"
5343	Honn, Rowena.	January	2, 1900	"	Des Moines.	Metcalf, Ill.	"
5313	House, E. M.	January	2, 1900	By examination.	Marengo.	Moravia.	"
5313	Halden, J. W.	February	6, 1900	"	Moulton.	"	"
5313	Harris, Irving.	February	6, 1900	"	Storm Lake.	"	"
5363	Hall, Guy F.	March	6, 1900	Graduate.	Des Moines.	Blakesburg.	"
5343	Hansen, Hans.	March	6, 1900	By examination.	Des Moines.	Logan.	"
5390	Helman, M. H.	April	3, 1900	"	Bode.	"	"

## ABSTRACT—CONTINUED.

Number of or- thitane.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5596	Hansen, Martin E.	May 1, 1900	Graduate	Davenport.	Shambaugh.	
5597	Howland, Pearl L.	1, 1900	"	Villaca.	Adel.	
5598	Heston, Harry B.	1, 1900	"	Atalissa.	Adel.	
5599	Hart, Bert.	1, 1900	"	Danbury.	Adel.	
5600	Hegonbotham, W. E.	1, 1900	By examination.	Centerville.	Colorado.	
5601	Higley, D. J.	1, 1900	"	Grand View.	Colorado.	
5602	Hess, John W.	1, 1900	"	Des Moines.	Colorado.	
5603	Hamilton, John R.	1, 1900	"	Keota.	Colorado.	
5604	Hanford, Geo. A.	2, 1900	Assistant.	Des Moines.	Florida.	
5605	Hope, Eva Pearl	7, 1900	Graduate	Little Sioux.	Nebraska.	
5606	Harrington, L. D.	2, 1900	By examination.	Grand Mound.	Nebraska.	
5607	Holihan, R. T.	2, 1900	"	Rockwell.	South Dakota.	
5608	Holloway, C. L.	8, 1900	Graduate	Des Moines.	Westphalia.	
5609	Hayes, R. B.	8, 1900	By examination.	Des Moines.	Kelly.	
5610	Hilbrand, Mike	8, 1900	"	Ackley.	Virginia.	
5611	Harvey, A. B.	4, 1900	Graduate	Washington.	Marathon.	
5612	Hatter, L. W.	4, 1900	"	Millersburg.	Missouri.	
5613	Hanson, John J.	1, 1901	Graduate	Thor.	Illinois.	
5614	Hough, Warren	5, 1901	"	Bedford.	Olds.	
5615	Hornel, Eckert E.	7, 1901	"	Iowa City.	Nebraska.	
5616	Harvey, James R.	7, 1901	"	Pleasant Plain.	Nebraska.	
5617	Horton, Grant.	7, 1901	"	Brighton.	Nebraska.	
5618	Hansen, Otto T.	7, 1901	"	Wainut.	Nebraska.	
5619	Halloran, T. J.	7, 1901	By examination.	Dumont.	Nebraska.	
5620	Holt, Stephen A.	4, 1901	Graduate	Lake City.	Gross, Neb.	
5621	Head, M. W.	4, 1901	By examination.	Imogene.	Gross, Neb.	
5622	Hill, Earl	4, 1901	"	Mt. Vernon.	Gross, Neb.	
5623	Hansen, N. H.	6, 1901	Graduate	Audubon.	Gross, Neb.	
5624	Hartman, H. H.	6, 1901	"	Des Moines.	Gross, Neb.	
5625	Hedley, Lyell	8, 1901	"	Shelly.	Gross, Neb.	
5626	Hepler, George K.	8, 1901	"	Des Moines.	Gross, Neb.	
5627	Ham, Otto	8, 1901	"	Victor.	Gross, Neb.	
5628	Hurd, John W.	2, 1901	"	Northwood.	Gross, Neb.	
5629	Hild, E. J.	1, 1901	"	Tama.	Gross, Neb.	
5630	Hoese, Fred H.	8, 1901	"	Dubuque.	Gross, Neb.	
5631	Harkin, Shirley D.	8, 1901	"	Oceola.	Gross, Neb.	
5632	Haggin, O. F.	8, 1901	By examination.	Dayton.	Gross, Neb.	
5633	Hansen, Martin E.	1, 1900	Graduate	Davenport.	Shambaugh.	
5634	Howland, Pearl L.	1, 1900	"	Villaca.	Adel.	
5635	Heston, Harry B.	1, 1900	"	Atalissa.	Adel.	
5636	Hart, Bert.	1, 1900	"	Danbury.	Adel.	
5637	Hegonbotham, W. E.	1, 1900	By examination.	Centerville.	Colorado.	
5638	Higley, D. J.	1, 1900	"	Grand View.	Colorado.	
5639	Hess, John W.	1, 1900	"	Des Moines.	Colorado.	
5640	Hamilton, John R.	1, 1900	"	Keota.	Colorado.	
5641	Hanford, Geo. A.	2, 1900	Assistant.	Des Moines.	Florida.	
5642	Hope, Eva Pearl	7, 1900	Graduate	Little Sioux.	Nebraska.	
5643	Harrington, L. D.	2, 1900	By examination.	Grand Mound.	Nebraska.	
5644	Holihan, R. T.	2, 1900	"	Rockwell.	South Dakota.	
5645	Holloway, C. L.	8, 1900	Graduate	Des Moines.	Westphalia.	
5646	Hayes, R. B.	8, 1900	By examination.	Des Moines.	Kelly.	
5647	Hilbrand, Mike	8, 1900	"	Ackley.	Virginia.	
5648	Harvey, A. B.	4, 1900	Graduate	Washington.	Marathon.	
5649	Hatter, L. W.	4, 1900	"	Millersburg.	Missouri.	
5650	Hanson, John J.	1, 1901	Graduate	Thor.	Illinois.	
5651	Hough, Warren	5, 1901	"	Bedford.	Olds.	
5652	Hornel, Eckert E.	7, 1901	"	Iowa City.	Nebraska.	
5653	Harvey, James R.	7, 1901	"	Pleasant Plain.	Nebraska.	
5654	Horton, Grant.	7, 1901	"	Brighton.	Nebraska.	
5655	Hansen, Otto T.	7, 1901	"	Wainut.	Nebraska.	
5656	Halloran, T. J.	7, 1901	By examination.	Dumont.	Nebraska.	
5657	Holt, Stephen A.	4, 1901	Graduate	Lake City.	Gross, Neb.	
5658	Head, M. W.	4, 1901	By examination.	Imogene.	Gross, Neb.	
5659	Hill, Earl	4, 1901	"	Mt. Vernon.	Gross, Neb.	
5660	Hansen, N. H.	6, 1901	Graduate	Audubon.	Gross, Neb.	
5661	Hartman, H. H.	6, 1901	"	Des Moines.	Gross, Neb.	
5662	Hedley, Lyell	8, 1901	"	Shelly.	Gross, Neb.	
5663	Hepler, George K.	8, 1901	"	Des Moines.	Gross, Neb.	
5664	Ham, Otto	8, 1901	"	Victor.	Gross, Neb.	
5665	Hurd, John W.	2, 1901	"	Northwood.	Gross, Neb.	
5666	Hild, E. J.	1, 1901	"	Tama.	Gross, Neb.	
5667	Hoese, Fred H.	8, 1901	"	Dubuque.	Gross, Neb.	
5668	Harkin, Shirley D.	8, 1901	"	Oceola.	Gross, Neb.	
5669	Haggin, O. F.	8, 1901	By examination.	Dayton.	Gross, Neb.	
5670	Hansen, Martin E.	1, 1900	Graduate	Davenport.	Shambaugh.	
5671	Howland, Pearl L.	1, 1900	"	Villaca.	Adel.	
5672	Heston, Harry B.	1, 1900	"	Atalissa.	Adel.	
5673	Hart, Bert.	1, 1900	"	Danbury.	Adel.	
5674	Hegonbotham, W. E.	1, 1900	By examination.	Centerville.	Colorado.	
5675	Higley, D. J.	1, 1900	"	Grand View.	Colorado.	
5676	Hess, John W.	1, 1900	"	Des Moines.	Colorado.	
5677	Hamilton, John R.	1, 1900	"	Keota.	Colorado.	
5678	Hanford, Geo. A.	2, 1900	Assistant.	Des Moines.	Florida.	
5679	Hope, Eva Pearl	7, 1900	Graduate	Little Sioux.	Nebraska.	
5680	Harrington, L. D.	2, 1900	By examination.	Grand Mound.	Nebraska.	
5681	Holihan, R. T.	2, 1900	"	Rockwell.	South Dakota.	
5682	Holloway, C. L.	8, 1900	Graduate	Des Moines.	Westphalia.	
5683	Hayes, R. B.	8, 1900	By examination.	Des Moines.	Kelly.	
5684	Hilbrand, Mike	8, 1900	"	Ackley.	Virginia.	
5685	Harvey, A. B.	4, 1900	Graduate	Washington.	Marathon.	
5686	Hatter, L. W.	4, 1900	"	Millersburg.	Missouri.	
5687	Hanson, John J.	1, 1901	Graduate	Thor.	Illinois.	
5688	Hough, Warren	5, 1901	"	Bedford.	Olds.	
5689	Hornel, Eckert E.	7, 1901	"	Iowa City.	Nebraska.	
5690	Harvey, James R.	7, 1901	"	Pleasant Plain.	Nebraska.	
5691	Horton, Grant.	7, 1901	"	Brighton.	Nebraska.	
5692	Hansen, Otto T.	7, 1901	"	Wainut.	Nebraska.	
5693	Halloran, T. J.	7, 1901	By examination.	Dumont.	Nebraska.	
5694	Holt, Stephen A.	4, 1901	Graduate	Lake City.	Gross, Neb.	
5695	Head, M. W.	4, 1901	By examination.	Imogene.	Gross, Neb.	
5696	Hill, Earl	4, 1901	"	Mt. Vernon.	Gross, Neb.	
5697	Hansen, N. H.	6, 1901	Graduate	Audubon.	Gross, Neb.	
5698	Hartman, H. H.	6, 1901	"	Des Moines.	Gross, Neb.	
5699	Hedley, Lyell	8, 1901	"	Shelly.	Gross, Neb.	
5700	Hepler, George K.	8, 1901	"	Des Moines.	Gross, Neb.	
5701	Ham, Otto	8, 1901	"	Victor.	Gross, Neb.	
5702	Hurd, John W.	2, 1901	"	Northwood.	Gross, Neb.	
5703	Hild, E. J.	1, 1901	"	Tama.	Gross, Neb.	
5704	Hoese, Fred H.	8, 1901	"	Dubuque.	Gross, Neb.	
5705	Harkin, Shirley D.	8, 1901	"	Oceola.	Gross, Neb.	
5706	Haggin, O. F.	8, 1901	By examination.	Dayton.	Gross, Neb.	

6517	Hartman, Perry Vernon.....	January	1, 1903	Graduate	Boone.....	Fraser.
6524	Hansen, John F.....	December	6, 1902	"	Des Moines.....	Belle Plaine.
6525	Hast, Arthur E.....	December	6, 1902	"	Centerville.....	Sidney.
6531	Hazen, W. J.....	December	6, 1902	"	Belle Plaine.....	Webster City.
6547	Hayden, L. J.....	February	4, 1903	By examination	Harcourt.....	
6553	Hilliard, V. E.....	February	4, 1903	"	Albia.....	Afton.
6558	Henrickson, Jesse.....	March	4, 1903	"	Odebolt.....	Garwin.
6565	Henderson, Harry.....	April	1, 1903	Graduate	Toledo.....	Iowa City.
6567	Hill, Albert E.....	April	1, 1903	"	Green.....	
6574	Hanzlik, Paul J.....	April	1, 1903	"	Cedar Rapids.....	
6580	Harlan, Robert N.....	April	1, 1903	By examination	Colo.....	Webster City.
6584	Higbee, H. G.....	April	1, 1903	"	Fairbank.....	Des Moines.
6585	Hyde, Clarence B.....	April	1, 1903	"	Oskaloosa.....	Stuart.
6593	Hutchinson, Joe W.....	April	1, 1903	"	Tryon.....	
6594	Hicks, A. M.....	April	1, 1903	"	Neola.....	Atlantic.
6594	Harris, James P.....	May	1, 1902	Graduate	Moulton.....	Colorado.
6598	Hanson, Wm. K.....	May	6, 1902	By examination	Marshalltown.....	LeClaire.
6703	Hopkins, R. H.....	June	8, 1902	Graduate	Colo.....	Illinoia.
6710	Hopson, W. H.....	June	29, 1902	"	Des Moines.....	
6719	Herrick, E. A.....	August	5, 1903	"	Ottumwa.....	
6760	Hronadka, A. E.....	August	5, 1903	"	De Moines.....	Illinoia.
6761	Hully, Chas. I.....	August	5, 1902	"	Elliott.....	
6763	Hallon, H. R.....	August	5, 1902	"	Hedrick.....	Barlington.
6815	Holmes, Geo. H.....	August	5, 1902	"	Des Moines.....	Sioux City.
6816	Hillestad, Knute E.....	August	5, 1902	"	Des Moines.....	Clarion.
6833	Hopps, Clifford C.....	August	6, 1903	"	LeMars.....	Mississippi.
6838	Hastings, P. H.....	August	21, 1902	"	Kanawha.....	
6847	Hand, E. H.....	October	7, 1903	"	Des Moines.....	
6881	Haney, Franklin H.....	October	7, 1903	"	McIntyre.....	
6892	Haney, Franklin H.....	October	7, 1903	"	Des Moines.....	
6893	Halstom, Wm. A.....	December	2, 1902	"	Cedar Rapids.....	
6909	Harris, R. L.....	December	2, 1902	By examination	Iowa City.....	Louisiana.
6921	Harrison, James H.....	December	2, 1902	Graduate	Muscatine.....	Lone Tree.
6945	Hattenhaner, W. B.....	February	8, 1903	By examination	Keokuk.....	Logan.
6946	Harr, Homer.....	February	8, 1903	By examination	Des Moines.....	Illinoia.
6947	Hawley, H. C.....	February	8, 1903	"	Klemme.....	Strawberry Point.
6991	Harker, Stewart W.....	April	23, 1903	"	Clarinda.....	
7013	Hill, D. W.....	April	23, 1903	"	Cedar Falls.....	Hawarden.
7014	Hatton, Orville E.....	April	23, 1903	Graduate	Libertyville.....	
7030	Hatton, H. T.....	April	23, 1903	"	Millersburg.....	
7031	Hofar, J. D.....	May	6, 1903	"	Montrose.....	
7034	Hughes, Bert.....	June	2, 1903	By examination	Des Moines.....	South Dakota.
7035	Honens, H. B.....	June	2, 1903	Graduate	Emmetsburg.....	Illinoia.
7054	Head, S. W.....	July	1, 1903	"	Davenport.....	Illinoia.
7068	Hansen, J. F.....	July	1, 1903	"	Iowa City.....	
7070	Hydinger, H. E.....	July	1, 1903	"	Fort Dodge.....	
7081	Holm, M. L.....	July	1, 1903	"	Hamburg.....	
7082	Haas, O. J.....	July	7, 1903	"	Des Moines.....	
7115	Hell, Ed.....	August	4, 1903	"	Lansing.....	Illinoia.
7116	Heck, R. S.....	August	4, 1903	"	Des Moines.....	Missouri.
				"	McGregor.....	Minnesota.

In Wisconsin.

In S. Carolina.  
In Chicago.

In Illinois.

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
7147	Hanna, H. F.	August 4, 1903	Graduate	Oaklaoka.		
7148	Reyl, Frederick	August 4, 1903	By examination	Le Mars.		
7149	Hart, Louis	October 6, 1903	Graduate	Dubuque	Indiana.	
7150	Helt, O. L.	October 6, 1903	"	Des Moines	Illinois.	
7204	Haverick, W. V.	October 6, 1903	By examination	Oreston.		
7224	Hope, L.	October 2, 1903	Graduate	Little Sioux.		
7233	Holland, Fred.	December 1, 1903	By examination	Delta.		
7234	Holland, G. S.	December 1, 1903	"	Des Moines.	Cedar Rapids.	
7235	Hieber, W. A. N.	February 2, 1904	Graduate	Davenport.	Nebraska.	
7236	Hazleton, W. W.	February 2, 1904	By examination	Calmar.	Buffalo.	
7308	Hargarten, W. F.	February 2, 1904	"	Grandy Center.	Manchester.	
7309	Hartgering, A. J.	February 2, 1904	"	Des Moines.	Hartley.	
7320	Hennings, B. M.	February 2, 1904	"	Des Moines.	Mason City.	
7321	Hart, A. J.	May 20, 1904	Graduate	Dubuque.	Minnesota.	
7372	Hancock, W. R.	May 20, 1904	"	Maquoketa.		
7373	Haines, C. J.	May 20, 1904	"	Massena.		
7387	Hager, E. J.	June 7, 1904	By examination	Galva.		
7388	Higgins, E. J.	June 7, 1904	"	Emmetsburg.		
7389	Hoffman, V. A.	June 7, 1904	"	New Hampton.		
7400	Hoffman, W. A.	June 7, 1904	"	Nora Springs.		
7420	Held, C. A.	July 1, 1904	Graduate	Iowa City.	Floyd.	
7421	Henderson, L. R.	July 1, 1904	"	Moscow.		
7422	Henderson, L. R.	July 1, 1904	"	New Virginia.		
7423	Hammer, C. A.	July 1, 1904	"	Des Moines.	Des Moines.	
7424	Haddock, Edward.	July 1, 1904	"	Maquoketa.	Illinois.	
7440	Hamley, A. L.	August 2, 1904	By examination	Des Moines.	Washington.	
7491	Hooper, J. H.	August 2, 1904	"	Des Moines.	Texas.	
7492	Hall, C. E.	August 2, 1904	"	Blacksburg.	Scottport.	
7493	Halden, M. L.	August 2, 1904	"	Union.	Ottumwa.	
7507	Hirshy, E. D.	October 4, 1904	Graduate	Surlington.	Illinois.	
7522	Hunter, M. D.	October 4, 1904	"	Sorath.		
7535	Hall, R. B.	December 6, 1904	"	Des Moines.	Illinois.	
7546	Hanson, Chris.	December 6, 1904	"	Des Moines.	South Dakota.	
7566	Hansen, E. A.	February 7, 1905	"	Cedar Rapids.	Wisconsin.	
7567	Horten, I. M.	February 7, 1905	"	Des Moines.	Arkansas.	
7579	Holmes, Oliver	February 7, 1905	By examination	Des Moines.	Ottumwa.	
7583	Harding, M. J.	February 7, 1905	"	Barter.	Marshalltown.	
7584	Horsch, Ed. C.	February 7, 1905	"	Ft. Dodge.		

7690	Hough, J. B.	June	6, 1905	Graduate	Mt. Hamil	Illinois.
7691	Hofman, F. E.	June	6, 1905	By examination	Iowa Falls.	Illinois.
7692	Hage, A.	June	19, 1905	Graduate	Des Moines.	Illinois.
7675	Howe, H. W.	July	12, 1905	"	Dubuque	Wisconsin.
7680	Rees, Winfield	July	12, 1905	"	Des Moines.	"
7685	Humphrey, R. E.	July	12, 1905	"	Bagley.	"
7703	Hagensick, R. H.	July	12, 1905	By examination	Elkader.	"
7704	Hagensek, T. S.	July	12, 1905	"	Grinnell.	"
7718	Hassall, G. A.	August	1, 1905	Graduate	Kokuk.	Henderson.
7698	Irwin, Charles E.	August	1, 1905	By examination	Elkader.	"
7696	Ingersoll, R. B.	April	17, 1892	"	Keokuk.	Clinton.
7678	Isbell, G. A.	May	12, 1893	"	Keokuk.	"
7659	Ingvoldstad, C. O.	November	20, 1898	"	Maquoketa.	Sergeants Bluff.
7668	Ingelsund, Fritz E.	February	14, 1899	"	Des Moines.	Dawson.
7689	Israel, Miss Mary	February	17, 1891	"	Des Moines.	"
7693	Irwin, William T.	February	17, 1891	"	Brighton only).	Valley Junction.
4234	Isbel, Arthur	November	1, 1892	"	Oresco.	"
4235	Irwin, Henry	November	1, 1892	"	Angus.	Kenilworth.
4236	Ingersoll, J. B.	December	12, 1892	"	Boone.	Sergeants Bluff.
4239	Iverson, Will	May	1, 1900	Graduate	Des Moines.	Ft. Dodge.
4246	Iddings, C. W.	June	5, 1900	By examination	Mapleton.	"
6275	Iddings, C. W.	March	4, 1902	"	Mapleton.	"
7674	Isaacson, C. A.	October	4, 1904	"	Fort Dodge.	"
7680	Ivetz, John	October	6, 1904	Graduate	Des Moines.	Minnesota.
7681	Irwin, J. J.	June	6, 1905	"	Keokuk.	Illinois.
7708	Irwin, L. J.	July	12, 1905	By examination	Logan.	"
7998	Johnson, S. M.	June	19, 1890	As owner	Carson.	"
8297	Johnson, Ella S.	June	19, 1890	As assistant	Carson.	"
851	Johnson, Henry	June	8, 1890	As owner	Cedar Falls.	"
407	Johnson, Henry	June	12, 1890	As assistant	Des Moines.	"
620	Tan's, Edwin d. L.	June	8, 1890	As owner	Grinnell.	"
748	Johnson, J. O. G.	June	8, 1890	"	La Porte City.	"
1018	Tames, Isaac	June	8, 1890	"	Calwein.	Burlington.
1807	Tordani, George W.	August	27, 1890	"	Danville.	"
1894	Tones, J. B.	November	19, 1890	"	Fertile.	Atlantic.
1895	Tones, J. B.	October	18, 1890	By examination	Denison.	"
2012	Toder, Josiah K.	April	15, 1891	As assistant	Waterloo.	St. Charles.
2073	Tennings, Joseph Jr.	April	7, 1891	By examination	Wilton Junction.	Ida Grove.
2289	Tennings, Joseph Jr.	December	6, 1891	"	La Moille.	Beaconsfield.
2372	Tones, Thomas B.	March	25, 1892	"	Breda.	"
2468	Tones, Uriah C.	June	5, 1892	"	Clinton.	"
2722	Tenn, Milo J.	February	18, 1894	"	Clinton.	"
2900	Tenkins, Hugh	September	2, 1894	"	Shenandoah.	"
3046	Jay, George H.	September	2, 1894	"	Shenandoah.	"
3077	Jackson, J. W.	September	21, 1896	Graduate	Des Moines.	"
3292	Jericho, John H.	September	21, 1896	By examination	Mt. Pleasant.	"
8348	Jurgensen, P. H.	August	17, 1897	"	Clinton	Lowden.
8358	Jordan, John A.	November	17, 1897	"	Des Moines.	Burlington.
8367	Jordan, H. M.	December	21, 1897	"	Danville	Rockwell City.
8551	Joselyn, E. S.	January	17, 1898	"	Stratford.	"
8551	Joselyn, E. S.	November	1, 1898	"	"	"

In Colorado.

In Missouri.

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Place of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
3644	Judisch, George.	April	By examination	Muscatine.	Ames.	
3636	Jones, E. S.	May	"	Chariton.	New York.	
3796	Johnson, Charles J.	January	"	Clarinda.	Morgan Valley.	
3796	John, G. W.	January	"	Rueas.	Norwalk.	
3829	Jones, Paul W.	January	"	Poland.		
3834	Jones, Roland	March	"	Le Mars.		
3861	Johnson, R. L.	September	"	Manhope.	Des Moines.	
3822	Joder, A. H.	September	"	Waterloo.	Hudson.	
4072	Jones, L. H.	March	"	Shelby.	Oakland.	
4072	Johnson, E. W.	June	"	Ottumwa.	Luther.	
4108	Johnson, E. B.	August	"	Irwin.	Boyer.	
4113	Jessen, Balzer T.	September	"	Gumbrland.	Atlantic.	In Colorado.
4183	Jones, Samuel A.	January	"	Clarinda.	Des Moines.	
4197	Jones, Harry F.	March	"	Ottumwa.	Des Moines.	
4199	Johnson, Anton C.	March	Graduate	Storia Rapids	Des Moines.	
4233	Folkinson, Henry A.	May	By Examination	Des Moines.	Volos City.	In Minnesota.
4233	Folkinson, Henry A.	October	"	Des Moines.	Sharpsburg.	
4277	Folstrup, A. E.	December	"	Mason.	David S. D.	
4264	Folhus, E. D.	January	"	Clarinda.	Albia.	
4278	Folhuson, Des W.	February	"	Jewell Junction.	Weeping Water, Neb.	
4441	Folhuson, Hans	May	"	Sigourney.	Des Moines.	
4447	Folhuson, J. N.	November	"	Carbon.	Logan.	
4590	Fones, J. D.	January	"	Des Moines.	Marshalltown.	
4638	Fones, Henry	March	"	Des Moines.	Straford.	
4638	Folkinson, Franklin	May	Graduate	Ashley.		
4655	Funkerman, Julius	June	By examination	Carbon.		
4655	Jackson, M. E.	October	"	Callender.	Manson.	
4751	Johnson, William F.	October	"	Keosauqua.	Cedar Rapids.	
4855	Jones, A. P.	March	"	Keosauqua.		
4828	Jackson, T. C.	August	"	Clarinda.		
4939	Jeffery, Frank D.	December	"	Cedar Rapids.		In Utah.
5119	Johnson, T. W.	August	"	Le Mars.		
5122	Jones, C. H.	August	"	Lenox.		
5144	Johnson, E. R.	September	"	Davenport.	Gowrie.	
5161	Johannsen, Otto	October	Graduate	Toledo.	Des Moines.	New York.
5386	Junker, W. E.	October	By examination	Rad Oak	Shenandoah.	
5454	Jackson, T. C.	April	"			

5465	Johnson, G. J.	April	By examination.	Sioux Rapids	Sanborn.	In Oklahoma.
5466	Jarvis, Charles B.	August	Graduate	Blackton.	.....	In N. Dakota.
5467	Johnson, A. L.	January	By examination	Des Moines.	.....	
5469	Jenkins, W. J.	January	"	Colfax.	.....	
5470	Jensen, W. F.	January	"	Holstein.	.....	
5471	Junger, W. F.	May	Graduate	Reinbeck.	.....	
5472	Juricho, Albert.	May	By examination.	Mt. Pleasant.	Cantrill.	
5473	Jones, J. W.	June	Graduate	Guthrie Center.	Kenewaha.	
5474	Jones, M. L.	June	By examination.	Arcadia.	Albion.	
5475	Jentsch, C. B.	September	"	Etherville.	Lime Springs.	
5476	Johnson, B. M.	October	"	Wesley.	Rake.	
5477	Johnson, Otto.	March	"	Des Moines.	Perry.	
5478	Jacobs, F. R.	March	"	Rolle.	Paton.	
5479	Jensen, A. M.	April	"	Forest City	.....	
5480	Jones, Ernest H.	April	Graduate	Des Moines.	Minnesota.	In Missouri.
5481	Johnson, J. M.	June	By examination.	Des Moines.	.....	
5482	Johnson, Andrew	June	Graduate	Malvern.	Cedar Rapids.	In Nebraska.
5483	Jones, Harry O.	August	By examination.	Eagle Grove.	.....	In N. Dakota.
5484	Jackwitz, N.	September	Graduate	Des Moines.	Des Moines.	In Kansas.
5485	Jacques, Daniel M.	September	By examination.	Thor.	Jordan.	
5486	Jacques, E. G.	January	By examination.	Remsen.	Estherville.	
5487	Johnson, A. H.	January	"	New Hampton.	.....	
5488	Johnson, Jay	March	"	Des Moines.	.....	
5489	Jones, Frank E.	March	Graduate	Grinnell.	Story City.	In Nebraska.
5490	Joy, Nellie F.	May	"	Des Moines.	.....	
5491	Johnson, A. I.	August	"	Des Moines.	.....	
5492	Johnson, Telply E.	August	"	Fairfield.	.....	
5493	Johnson, Carl A.	August	"	Des Moines.	.....	
5494	Juricho, Fred W.	August	By examination.	Fairfield.	Colorado.	
5495	Jones, James T.	August	"	Fairfield.	.....	
5496	Jones, R. E.	September	Graduate	Des Moines.	Nora Springs.	In Minnesota.
5497	Jandera, B. O.	October	By examination	Cedar Rapids.	.....	
5498	Johnson, Charles	October	"	Eagle Grove.	.....	
5499	Jackson, Frank P.	November	Graduate	Des Moines.	.....	
5500	Johnson, Nellus J.	November	By examination.	Decorah.	.....	
5501	Jones, Marion J.	January	Graduate	Lemars.	.....	
5502	Jones, K. D.	January	"	Freshfield.	.....	
5503	Jones, James C.	March	Graduate	Winfield.	.....	
5504	Jander, Paul H.	March	By examination	Reinbeck.	.....	
5505	Jepson, Alvin L.	April	"	Iowa City.	.....	
5506	Jones, Charlotte F.	April	Graduate	Des Moines.	.....	
5507	Jones, O. F.	May	By examination	Des Moines.	.....	
5508	Jones, W. E.	May	Graduate	Cedar Rapids.	.....	
5509	Johnson, Guy D.	July	By examination	Keosauqua.	.....	
5510	Jackson, J. M.	August	Graduate	Osgo.	.....	
5511	Jefferson, Clarence R.	August	By examination.	Des Moines.	.....	
5512	Jennings, Roscoe W.	October	"	Des Moines.	.....	

## ABSTRACT—CONTINUED.

Number of cor titicate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6948	Jones Ben G.	February	By examination	Beaconfield.	Indian Territory.	
6976	Jones, Charles H.	April	"	Dubuque	Wisconsin.	
6992	Johnson William H.	April	"	Webb		Illinois.
7028	Justus, S. V.	May	Graduate	Clinton	Adel.	
7036	Jacger, A. C.	June	By examination.	Clear Lake.		
7063	Jeffers, Christine.	July	Graduate	Bellevue.		Oregon.
7166	Jefferson, B. E.	October	"	Ottumwa.		
7167	Johnson, A. W.	October	"	Cherokee	Manson.	
7168	Jordan, F. M.	October	"	Mt. Pleasant.		
7241	Jack, Clifford, G.	October	"	St. Louis.		
7310	Johnson, H. J.	December	By examination.	St. Louis City.	New Hampton.	Nebraska.
7311	Jepson, Jake	February	"	Axtley		
7314	Joder, E. B.	February	"	Everly		
7345	Joseph, E. D.	May	Graduate	Waterloo.		
7346	Joseph, J. C.	July	"	Hopkinton.		
7347	Joelin, G. A.	July	"	Dubuque		Minnesota.
7348	Johnson, B. L.	August	By examination	Keokuk.	Wisconsin.	
7359	Jedries, E. H.	August	"	Belmond.		
7362	Jedrich, Ernest	October	Graduate	Des Moines.	Barter.	
7314	Jennings, R. G.	April	"	Des Moines.		
7352	Jennison, O. P.	April	"	Des Moines.		Indiana.
7359	Jones, W. M.	June	"	Weldon.		Illinois.
7360	Jones, G. C.	June	"	Spencer.		
7373	Jones, W. M.	June	"	Waco.		Indiana.
7378	Jackson, M. C.	July	"	Des Moines.		
7383	Jackson, W. O.	July	"	Des Moines.		
7419	Junkin, H. D.	August	By examination.	Davenport.		
7425	Kirkman, C. T.	August	As owner.	Madison.		
7444	Kirkwood, J. W.	June	As owner.	Edridge Junction.		
7454	Kerr, David J.	June	As assistant.	Otley		
7491	Kieslich, J. F.	June	As owner.	Keokuk.		
7544	Kettering, S.	June	"	Keokuk.		
7545	Kemp, Albert	June	"	Lisbon.		
7546	Kennedy, M. T.	June	As assistant.	Monticello.		
7547	Kearney, H. F.	June	As owner.	McGregor.		
7548	Kearney, H. F.	June	"	Pella.		
7549	Kearney, H. F.	June	"	Pella.		
7550	Kearney, H. F.	June	"	Pella.		
7551	Kearney, H. F.	June	"	Pella.		
7552	Kearney, H. F.	June	"	Pella.		
7553	Kearney, H. F.	June	"	Pella.		
7554	Kearney, H. F.	June	"	Pella.		
7555	Kearney, H. F.	June	"	Pella.		
7556	Kearney, H. F.	June	"	Pella.		
7557	Kearney, H. F.	June	"	Pella.		
7558	Kearney, H. F.	June	"	Pella.		
7559	Kearney, H. F.	June	"	Pella.		
7560	Kearney, H. F.	June	"	Pella.		
7561	Kearney, H. F.	June	"	Pella.		
7562	Kearney, H. F.	June	"	Pella.		
7563	Kearney, H. F.	June	"	Pella.		
7564	Kearney, H. F.	June	"	Pella.		
7565	Kearney, H. F.	June	"	Pella.		
7566	Kearney, H. F.	June	"	Pella.		
7567	Kearney, H. F.	June	"	Pella.		
7568	Kearney, H. F.	June	"	Pella.		
7569	Kearney, H. F.	June	"	Pella.		
7570	Kearney, H. F.	June	"	Pella.		
7571	Kearney, H. F.	June	"	Pella.		
7572	Kearney, H. F.	June	"	Pella.		
7573	Kearney, H. F.	June	"	Pella.		
7574	Kearney, H. F.	June	"	Pella.		
7575	Kearney, H. F.	June	"	Pella.		
7576	Kearney, H. F.	June	"	Pella.		
7577	Kearney, H. F.	June	"	Pella.		
7578	Kearney, H. F.	June	"	Pella.		
7579	Kearney, H. F.	June	"	Pella.		
7580	Kearney, H. F.	June	"	Pella.		
7581	Kearney, H. F.	June	"	Pella.		
7582	Kearney, H. F.	June	"	Pella.		
7583	Kearney, H. F.	June	"	Pella.		
7584	Kearney, H. F.	June	"	Pella.		
7585	Kearney, H. F.	June	"	Pella.		
7586	Kearney, H. F.	June	"	Pella.		
7587	Kearney, H. F.	June	"	Pella.		
7588	Kearney, H. F.	June	"	Pella.		
7589	Kearney, H. F.	June	"	Pella.		
7590	Kearney, H. F.	June	"	Pella.		
7591	Kearney, H. F.	June	"	Pella.		
7592	Kearney, H. F.	June	"	Pella.		
7593	Kearney, H. F.	June	"	Pella.		
7594	Kearney, H. F.	June	"	Pella.		
7595	Kearney, H. F.	June	"	Pella.		
7596	Kearney, H. F.	June	"	Pella.		
7597	Kearney, H. F.	June	"	Pella.		
7598	Kearney, H. F.	June	"	Pella.		
7599	Kearney, H. F.	June	"	Pella.		
7600	Kearney, H. F.	June	"	Pella.		
7601	Kearney, H. F.	June	"	Pella.		
7602	Kearney, H. F.	June	"	Pella.		
7603	Kearney, H. F.	June	"	Pella.		
7604	Kearney, H. F.	June	"	Pella.		
7605	Kearney, H. F.	June	"	Pella.		
7606	Kearney, H. F.	June	"	Pella.		
7607	Kearney, H. F.	June	"	Pella.		
7608	Kearney, H. F.	June	"	Pella.		
7609	Kearney, H. F.	June	"	Pella.		
7610	Kearney, H. F.	June	"	Pella.		
7611	Kearney, H. F.	June	"	Pella.		
7612	Kearney, H. F.	June	"	Pella.		
7613	Kearney, H. F.	June	"	Pella.		
7614	Kearney, H. F.	June	"	Pella.		
7615	Kearney, H. F.	June	"	Pella.		
7616	Kearney, H. F.	June	"	Pella.		
7617	Kearney, H. F.	June	"	Pella.		
7618	Kearney, H. F.	June	"	Pella.		
7619	Kearney, H. F.	June	"	Pella.		
7620	Kearney, H. F.	June	"	Pella.		
7621	Kearney, H. F.	June	"	Pella.		
7622	Kearney, H. F.	June	"	Pella.		
7623	Kearney, H. F.	June	"	Pella.		
7624	Kearney, H. F.	June	"	Pella.		
7625	Kearney, H. F.	June	"	Pella.		
7626	Kearney, H. F.	June	"	Pella.		
7627	Kearney, H. F.	June	"	Pella.		
7628	Kearney, H. F.	June	"	Pella.		
7629	Kearney, H. F.	June	"	Pella.		
7630	Kearney, H. F.	June	"	Pella.		
7631	Kearney, H. F.	June	"	Pella.		
7632	Kearney, H. F.	June	"	Pella.		
7633	Kearney, H. F.	June	"	Pella.		
7634	Kearney, H. F.	June	"	Pella.		
7635	Kearney, H. F.	June	"	Pella.		
7636	Kearney, H. F.	June	"	Pella.		
7637	Kearney, H. F.	June	"	Pella.		
7638	Kearney, H. F.	June	"	Pella.		
7639	Kearney, H. F.	June	"	Pella.		
7640	Kearney, H. F.	June	"	Pella.		
7641	Kearney, H. F.	June	"	Pella.		
7642	Kearney, H. F.	June	"	Pella.		
7643	Kearney, H. F.	June	"	Pella.		
7644	Kearney, H. F.	June	"	Pella.		
7645	Kearney, H. F.	June	"	Pella.		
7646	Kearney, H. F.	June	"	Pella.		
7647	Kearney, H. F.	June	"	Pella.		
7648	Kearney, H. F.	June	"	Pella.		
7649	Kearney, H. F.	June	"	Pella.		
7650	Kearney, H. F.	June	"	Pella.		
7651	Kearney, H. F.	June	"	Pella.		
7652	Kearney, H. F.	June	"	Pella.		
7653	Kearney, H. F.	June	"	Pella.		
7654	Kearney, H. F.	June	"	Pella.		
7655	Kearney, H. F.	June	"	Pella.		
7656	Kearney, H. F.	June	"	Pella.		
7657	Kearney, H. F.	June	"	Pella.		
7658	Kearney, H. F.	June	"	Pella.		
7659	Kearney, H. F.	June	"	Pella.		
7660	Kearney, H. F.	June	"	Pella.		
7661	Kearney, H. F.	June	"	Pella.		
7662	Kearney, H. F.	June	"	Pella.		
7663	Kearney, H. F.	June	"	Pella.		
7664	Kearney, H. F.	June	"	Pella.		
7665	Kearney, H. F.	June	"	Pella.		
7666	Kearney, H. F.	June	"	Pella.		
7667	Kearney, H. F.	June	"	Pella.		
7668	Kearney, H. F.	June	"	Pella.		
7669	Kearney, H. F.	June	"	Pella.		
7670	Kearney, H. F.	June	"	Pella.		
7671	Kearney, H. F.	June	"	Pella.		
7672	Kearney, H. F.	June	"	Pella.		
7673	Kearney, H. F.	June	"	Pella.		
7674	Kearney, H. F.	June	"	Pella.		
7675	Kearney, H. F.	June	"	Pella.		
7676	Kearney, H. F.	June	"	Pella.		
7677	Kearney, H. F.	June	"	Pella.		
7678	Kearney, H. F.	June	"	Pella.		
7679	Kearney, H. F.	June	"	Pella.		
7680	Kearney, H. F.	June	"	Pella.		
7681	Kearney, H. F.	June	"	Pella.		
7682	Kearney, H. F.	June	"	Pella.		
7683	Kearney, H. F.	June	"	Pella.		
7684	Kearney, H. F.	June	"	Pella.		
7685	Kearney, H. F.	June	"	Pella.		
7686	Kearney, H. F.	June	"	Pella.		
7687	Kearney, H. F.	June	"	Pella.		
7688	Kearney, H. F.	June	"	Pella.		
7689	Kearney, H. F.	June	"	Pella.		
7690	Kearney, H. F.	June	"	Pella.		
7691	Kearney, H. F.	June	"	Pella.		
7692	Kearney, H. F.	June	"	Pella.		
7693	Kearney, H. F.	June	"	Pella.		
7694	Kearney, H. F.	June	"	Pella.		
7695	Kearney, H. F.	June	"	Pella.		
7696	Kearney, H. F.	June	"	Pella.		
7697	Kearney, H. F.	June	"	Pella.		
7698	Kearney, H. F.	June	"	Pella.		
7699	Kearney, H. F.	June	"	Pella.		
7700	Kearney, H. F.	June	"	Pella.		
7701	Kearney, H. F.	June	"	Pella.		
7702	Kearney, H. F.	June	"	Pella.		
7703	Kearney, H. F.	June	"	Pella.		
7704	Kearney, H. F.	June	"	Pella.		
7705	Kearney, H. F.	June	"	Pella.		
7706	Kearney, H. F.	June	"	Pella.		
7707	Kearney, H. F.	June	"	Pella.		
7708	Kearney, H. F.	June	"	Pella.		
7709	Kearney, H. F.	June	"	Pella.		
7710	Kearney, H. F.	June	"	Pella.		
7711	Kearney, H. F.	June	"	Pella.		
7712	Kearney, H. F.	June	"	Pella.		
7713	Kearney, H. F.	June	"	Pella.		
7714	Kearney, H. F.	June	"	Pella.		
7715	Kearney, H. F.	June	"	Pella.		
7716	Kearney, H. F.	June	"	Pella.		
7717	Kearney, H. F.	June	"	Pella.		
7718	Kearney, H. F.	June	"	Pella.		
7719	Kearney, H. F.	June	"	Pella.		
7720	Kearney, H. F.	June	"	Pella.		
7721	Kearney, H. F.	June	"	Pella.		
7722	Kearney, H. F.	June	"	Pella.		
7723	Kearney, H. F.	June	"	Pella.		
7724	Kearney, H. F.	June	"	Pella.		
7725	Kearney, H. F.	June	"	Pella.		
7726	Kearney, H. F.	June	"	Pella.		
7727	Kearney, H. F.	June	"	Pella.		
7728	Kearney, H. F.	June	"	Pella.		
7729	Kearney, H. F.	June	"	Pella.		
7730	Kearney, H. F.	June	"	Pella.		
7731	Kearney, H. F.	June	"	Pella.		
7732	Kearney, H. F.	June	"	Pella.		
7733	Kearney, H. F.	June	"	Pella.		
7734	Kearney, H. F.	June	"	Pella.		
7735	Kearney, H. F.	June	"	Pella.		
7736	Kearney, H. F.	June	"	Pella.		
7737	Kearney, H. F.	June	"	Pella.		
7738	Kearney, H. F.	June	"	Pella.		
7739	Kearney, H. F.	June	"	Pella.		
7740	Kearney, H. F.	June	"	Pella.		
7741	Kearney, H. F.	June	"	Pella.		
7742	Kearney, H. F.	June	"	Pella.		
7743	Kearney, H. F.	June	"	Pella.		
7744	Kearney, H. F.	June	"	Pella.		
7745	Kearney, H. F.	June	"	Pella.		
7746	Kearney, H. F.	June	"	Pella.		
7747	Kearney, H. F.	June	"	Pella.		
7748	Kearney, H. F.	June	"	Pella.		
7749	Kearney, H. F.	June	"	Pella.		
7750	Kearney					

1800	Krebe, J. T.	September	10, 1880	By examination	Muscatine.	
1878	Keables, H. S.	January	12, 1881	As principal	Fella.	Blackton.
2155	King, Albert E.	June	15, 1881	By examination	Redding.	
2187	Kuenzel, H. C.	July	9, 1881		Garnaville.	
2250	Koto, P. O.	October	17, 1881		Forest City.	
2288	King, Thomas R.	December	9, 1881		Linnville.	Chariton.
2363	Kirk, Charles E.	January	28, 1883		Moulton.	Waterloo.
2516	Knap, James J.	August	18, 1883		Dubuque.	
2566	Keeler, Charles E.	March	21, 1883		Lake Mills.	Muscatine.
2588	Kuehmann, J. T.	April	27, 1885		Des Moines.	Council Bluffs.
2587	Kneist, Frank V.	March	2, 1886		Carroll.	Farmington.
3005	Kick, Fred.	August	6, 1886		Marengo.	
3083	Kiedalsch, J. Jr.	October	12, 1886	Graduate	Keokuk.	Sioux City.
3144	Knos, Lars Peter	March	1, 1887	By examination	Des Moines.	
3145	Kriebs, George	March	1, 1887		Elkport.	
3199	Klopp, J. J.	May	10, 1887		Etherville.	Des Moines.
3216	Kirk, A. M.	April	17, 1887		Cedar Rapids.	Ollinton.
3277	Kartman, M. R.	July	11, 1887		Ida Grove.	Auburn.
3323	Killheffer, J. F.	September	20, 1887		Hull.	
3380	Kessler, Joseph.	February	7, 1888		Cumberland.	Arion.
3381	Kiehl, R. S.	February	20, 1888		Autla.	
3399	King, E. R.	February	22, 1888	By examination	West Liberty.	
3403	Kennedy, A. L.	February	22, 1888		Newton.	California.
3441	Keasing, J. J.	April	17, 1888	Graduate	Owa City.	De Witt.
3545	Kent, Charles	October	24, 1888	Graduate	Cedar Rapids.	
3563	Koschert, F. H.	March	23, 1889	By examination	Davenport.	
3567	Kinyon, Leslie W.	August	3, 1889		Vail.	Whitten.
3709	Koehnman, E. O.	August	23, 1889		Hubbard.	
3763	Kramer, C. F.	November	18, 1889		McGregor.	Carson.
3768	Kistenmacher, E. J.	November	19, 1889		Davenport.	Belmont.
3824	Kettlemann, C. E.	January	31, 1890		Iowa City.	Hornick.
3843	Kenned, T. H.	February	10, 1890		Le Mars.	Scotland, S. D.
3851	Kiebs, F. H.	March	19, 1890		Paulina.	
3872	Kops, H. J. G.	April	18, 1890		Glad Junction.	Centerville.
3905	Karlin, S. O.	February	17, 1891		Waverly.	Sumner.
4050	Karffman, A.	May	6, 1891	Graduate	Davenport.	Fairfield.
4115	Kach, Francis J.	September	15, 1891	Graduate	Waverly.	Waterloo.
4155	Koehle, Theodoro A.	December	12, 1891	By examination	Laurel.	Minnesota.
4195	Keefe, Matt J.	March	8, 1892		Waverly.	Iowa Falls.
4249	Kramme, H. W.	June	21, 1892		Laurel.	Odebolt.
4307	Kinyon, C. P.	September	6, 1892		Ottumwa.	
4405	Kullmer, John	March	21, 1893	Graduate	Dysart.	
4555	Kaplan, Jay Gould	December	5, 1893	By examination	Rock Rapids.	
4594	Kent, C. W.	March	5, 1894		Hampton.	
4690	Kranz, George F.	June	5, 1894		Bellevue.	
4708	Ketterer, George A.	August	6, 1894		Gowrie.	
4712	Klenze, John E.	August	14, 1894		Davenport.	
4730	Kiner, F. C.	September	4, 1894		Ida Grove.	
4733	Kidd, Mrs. Emma F.	October	2, 1894		Riverton.	
4801	Keltz, Bert F.	January	2, 1895		Webster City.	



5874	Kelley, F. W.	December	By examination	Glenwood.	Pacific Junction.	Wisconsin.
5890	Kautenberger, Nick, Jr.	February	"	Des Moines.	Bondurant.	
5949	Kristiansen, Alfred.	March	"	Des Moines.	Oase.	
6001	Kane, W. P.	May	Graduate	New Hampton.	Lyona.	
6007	Kincald, Geo. E. H.	May	"	Muscatine.	Sanborn.	
6007	Koltermann, G. H.	May	"	Charles City.		
6089	Kindalsch, Geo. A.	June	"	Keokuk.		Illinois.
6081	Knoche, Geo. M.	August	"	Des Moines.	Cedar Rapids.	
6098	Kanealy, John F.	August	"	Van Arden.		Nebraska.
6100	King, L. R.	August	"	Bedford.		Wisconsin.
6148	Kucera, Ed. C.	October	"	Cedar Rapids.		
6180	Keating, Ed.	October	"	Stear City.	Dubuque.	
6237	Kuslan, A. J.	February	By examination	Ackley.	Kingsley.	
6238	Kunzmann, Chas.	March	Graduate	Des Moines.		California.
6234	Knipe, J. B.	April	"	Des Moines.	Nebraska.	
6283	Koenig, Geo. W.	May	"	Partaburg.		
6289	Kramm, G. L.	May	"	LeMars.	Perry.	
6337	Kavanagh, M. P.	June	By examination	Story City.	Marathon.	
6375	Kennedy, S. J.	August	Graduate	Dunlap.		Oklahoma.
6449	King, W. E.	September	"	Des Moines.	Clear Lake.	
6457	Kreider, Ray E.	September	"	Des Moines.		
6490	Kane, John H.	December	"	Oase.	Ryan.	
6500	Kionus, O. C.	December	By examination	Cushing.	Ft. Dodge.	
6508	Keboe, A. F.	December	Graduate	Elma.	Eddyville.	
6561	Keefe, A. J.	March	"	Marengo.	Victor.	
6565	Kuch, W. L.	March	"	Story City.	Mechanicsville.	
6566	Kopp, F. F.	March	"	Ft. Dodge.		Illinois.
6569	Kershaw, R. B.	April	By examination	West Liberty.	Wapello.	
6644	Kirby, S. I.	April	Graduate	Dubuque.	Manning.	
6663	Kies, Henry A.	May	"	Stunner.		Nebraska.
6665	Koch, John A.	June	"	Des Moines.		
6701	Kellogg, F. C.	June	"	Stout City.		
6728	Koepfstein, A. J.	June	"	Boone.	Corning.	
6737	Koch, H. J.	August	"	Des Moines.	Humboldt.	
6737	Kearby, J. M.	August	"	Keokuk.	Centerville.	
6738	Kinnett, Elmer	August	"	Moulton.	Davenport.	
6817	Kirschner, C. E.	August	"	Des Moines.	Jamaica.	
6833	Kinney, E. C.	August	"	Des Moines.		
6834	Kinn, B.	October	"	Algona.		
6846	Kain, A. J.	November	By examination	Chicago.	Early.	
6894	Klein, C. F.	February	"	Des Moines.		
6904	Krauch, F. W.	April	"	Davenport.		Illinois.
6934	Kittos, B. H.	April	"	Dubuque.	Dolliver.	
7012	Konrad, V. B.	May	Graduate	Manning.	Illinois.	
7022	Koniar, O.	May	"	Shall Rock.		
7026	Kelley, J.	June	By examination	Cedar Rapids.	Oncida.	
7035	Knox, S. T.	June	Graduate	Calmar.	Adel.	
7053	Knudson, T. H.	July	"	Audubon.	Oceola.	
7053	Kness, Grant	July	"			



1067	Lezotte, Charles H.	June	18, 1880	As principal.	Oaage.	
1168	Lander, Charles J.	June	6, 1880	As owner.	Marshalltown.	
1280	Lindley, B. B.	June	28, 1880	"	Winfield.	
1286	Lonoke, R. H.	July	12, 1880	"	Danbury.	
1473	Lewis, Edward H.	July	20, 1880	As assistant.	Sioux City.	Charlotte.
1701	Langheim, J. M.	August	7, 1880	By examination.	Davenport.	Clarinda.
1703	Lundy, W. L.	August	9, 1880	"	Corn.	
1718	Loper, John C.	August	20, 1880	As owner.	Des Moines.	
1864	Lowry, J. J.	January	8, 1881	"	Cresco.	
2010	Loper, James H.	February	17, 1881	By examination.	Des Moines.	
2074	Lane, Lewis H.	April	11, 1881	"	Muscatine.	
2160	Layton, H. R.	May	23, 1881	"	Leon.	
2161	Lax, Frederick	July	8, 1881	"	Webster City.	Hull.
2318	Lass, D. G.	September	27, 1881	"	Marshalltown.	
2325	Leibig, Rosa K.	September	1, 1881	"	Wilkesa.	
2316	Lyden, M.	December	12, 1881	"	Cass.	
2321	Little, M. A.	April	9, 1882	"	Lake City.	Webster City.
2475	Lease, A. B.	June	6, 1882	"	Decorah.	
2476	Laney, W. J.	September	14, 1882	"	West Branch.	Davis City.
2530	Loose, D. N.	September	19, 1882	"	Maquoketa.	
2532	Landon, O. M.	December	8, 1882	"	Law.	New Hampton.
2543	Landon, Henry	August	28, 1882	"	Law City.	
2717	Landon, W. B.	May	30, 1884	"	Columbus Junction.	Nora Springs.
2776	Lepke, John G.	June	18, 1884	"	Charles City.	
2821	Leck, Amos A.	December	8, 1884	"	Sheldahl.	
2823	Leck, Amos A.	April	8, 1885	"	Des Moines.	Slater.
2905	Lawrence, Ezra C.	July	28, 1885	"	Waterloo.	Oakland.
2909	Lee, J. Allison	March	4, 1886	"	Lone Tree.	Des Moines.
3190	Leas, D. W.	October	15, 1886	"	Monroe.	Nebaska.
3191	Lehard, W. L.	January	1, 1887	"	Hawarden.	California.
3192	Lendis, Jesse E.	February	12, 1887	"	Murray.	Oacola.
3263	Lakin, A. M.	February	12, 1887	"	Yale.	(For Yale only).
3268	Lakin, A. M.	May	3, 1887	"	Lawler.	
3268	Landon, Judd E.	June	7, 1887	"	Wellman.	
3268	Longwell, Jesse	August	16, 1887	"	Guthrie Center.	
3305	Longwell, A. D.	September	1, 1887	"	Winfield.	
3304	Lindley, J. M.	February	22, 1888	"	Dubuque.	
3454	Liek, Chan, W.	May	14, 1888	"	Grinnell.	
3455	Lewis, G. W.	July	11, 1888	"	Marshalltown.	Sioux City.
3459	Landler, Will B.	July	17, 1888	"	Boone.	Perry.
3501	Laughlin, M. R.	August	8, 1888	"	Redding.	Burlington.
3512	Layhead, W. E.	August	28, 1888	"	Des Moines.	
3521	Lawrence, E. S.	September	11, 1888	"	Creston.	Silver City.
3529	Leith, George W.	March	13, 1889	"	Creston.	
3536	Lundvall, N. A.	April	9, 1889	"	Dayton.	Sioux Rapids.
3538	Leach, James W.	May	21, 1889	"	Grand Junction.	Minnesota.
3599	LaForce, John A.	August	28, 1889	"	Ottumwa.	
3716	LaForce, D. A.	August	28, 1889	"	New Market.	Missouri.
3730	Love, Charles	September	13, 1889	"	Marion.	
3778	Lillis, L. M.	December	9, 1889	"		

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
3790	Loomis, F. W.	December 23, 1893	By examination	Shannon City.	Minnesota.	
3793	Lloyd, James H.	January 2, 1890	"	Westbranch.		
3803	Listerbarger, L. H.	January 24, 1890	"	Cedar Rapids		
3836	Loudon, L. W.	February 26, 1890	"	Oceola.		
3854	Larsen, T. S.	March 18, 1890	"	Ft. Dodge.	Washington.	
3916	Lies, Michael E.	July 28, 1890	"	Dubuque.		
3929	Lloyd, Burton W.	September 2, 1890	"	Sioux City.	Vinton.	
3960	LetGrange, T. G.	November 12, 1890	"	Garrison.	Greenfield.	
4046	Lampe, T. J.	May 6, 1891	"	West Lake.	West Point.	
4059	Lewis, Alfred W.	May 19, 1891	"	Greston.	Palmer.	
4157	Lewis, John A.	August 11, 1891	"	Inwood.		
4291	Laidgrat, F. J.	October 10, 1891	"	Manning.		
4313	Ladage, Henry W.	August 17, 1892	Graduate	Waterloo.		
4338	Luce, John	August 31, 1892	By examination	Grundy Center	Waterloo.	
4390	Loughran, Thomas J.	October 4, 1892	"	Villisca.		
4419	Lowery, O. W.	December 14, 1892	"	Ames.		
4431	Latimer, Glen M.	March 7, 1893	"	Grand Junction.	Tipton.	
4443	Larmon, A.	March 8, 1893	"	Mason.	Donnellson.	
4471	Latia, K. C.	April 6, 1893	"	Baton.		
4472	Larson, Charles O.	June 5, 1893	"	Burlington.		
4484	Luders, Wilto G.	June 5, 1893	"	Cherokee.	Marathon.	
4570	Lerner, William	August 1, 1893	"	Newton.	Melbourne.	
4593	Lehman, Mar Mid.	February 17, 1894	"	Remsen.	Mont.	
4601	Loring, John A.	February 17, 1894	"	Dallas Center	Sexton.	
4602	Little, Charles A.	March 6, 1894	"	Lemont.	Stettin.	
4610	Larson, C. W.	March 6, 1894	"	Sheldon.	Ottawa.	
4630	Luders, Edna H.	April 8, 1894	"	Sheldon.	Cresco.	
4636	Larson, Edna H.	April 8, 1894	"	Sheldon.		
4677	Lewis, C. G.	April 8, 1894	"	Alta.		
4743	Lore, John G.	June 5, 1894	"	Ames.	Waterloo.	
4746	Lohbert, O. H.	September 25, 1894	"	Lime Springs.		
4759	Londis, J. C.	October 2, 1894	"	Fonda.	Shannon City.	
4771	Londis, Samuel E.	October 12, 1894	"	Hampton.		
4782	Lell, William C.	November 12, 1894	"	Danbury.	Ida Grove.	
4825	Lehan, J. W.	December 4, 1894	"	Murray.	Oceola.	
		March	"	Dubuque.		
			"	Dunlap.		

4509	Lavery, Fred B.	April	2, 1894	By examination	Gresco.	Whittemore.	
4885	Landgren, Charles W.	May	7, 1895	"	Sioux City.		
4898	Lien, Albert E.	July	7, 1895	"	Eagle Grove.	Owassa.	
4932	Leitz, J. A.	December	7, 1895	"	Dubuque.		
4933	Leitz, W. A. C.	January	7, 1896	"	Grundy Center.		
4948	Lespinasse, A. F. H. de	February	4, 1896	"	Orange City.	New Providence.	
5015	Lespider, William	March	8, 1896	"	Ledyard.		
5037	Lee, T. M.	April	4, 1896	"	Lisbon.		
5132	Leopold, H. W.	September	1, 1896	"	Clinton.		
5167	Lyon, Charles	November	10, 1896	"	Pleasantville.	Eatherville.	
5221	Lagerquist, V. N.	March	2, 1897	"	Gowrie.	Eldora.	
5248	Lafranz, H. T.	April	6, 1897	"	Davenport.	Leclaire.	
5282	Lane, F. L.	June	1, 1897	"	Perry.	Monroe.	
5286	Litarody, E. P.	August	1, 1897	Graduate	Council Bluffs.	Burlington.	
5291	Large, J. B.	July	6, 1897	By examination	De Witt.	Ruthven.	
5302	Lerch, Fred, Jr.	July	6, 1897	"	Sioux City.		Illinois.
5316	Lenz, W. L.	August	16, 1896	"	Bellevue.		Ohio.
5388	Lyman, D. J.	February	1, 1898	"	Iowa Falls.	Emmetsburg.	
5414	Liffring, E. A.	March	1, 1893	"	Janesville.		
5433	Loar, G. W.	April	6, 1893	"	Monroe.		
5481	Lomas, E. T.	April	6, 1893	"	Gresco.		
5509	Leytze, F. C.	April	6, 1893	"	Independence.	South Dakota.	
5545	Langness, Olaf.	August	8, 1893	Graduate	Des Moines.		
5556	Large, A. F.	August	2, 1893	By examination	Bradyville.		
5568	Loti, H. V.	September	7, 1893	Graduate	Cedar Rapids.		Illinois.
5610	Le Gore, J. F.	December	6, 1893	By examination	Churdam.	Rockwell City.	
5611	Letson, G. A.	December	6, 1893	Graduate	Council Bluffs.		
5629	Linn, O. A.	February	7, 1899	"	Burlington.	Davenport.	
5675	Le Fevre, L. K.	April	23, 1899	"	Keokuk.	Spokane, Wash.	
5680	Lang, William	April	23, 18'9	"	Muscatine.	Wilton Junction.	
5709	Lemmon, J. E.	June	6, 1899	"	Washington.		Minnesota.
5719	Lamm, J. J.	July	6, 1899	"	Decorah.	Minnesota.	
5723	Lomen, Gustave	July	6, 1899	"	Conway.	Des Moines.	
5789	Liggett, B. W.	July	6, 1899	By examination	Davenport.		
5820	Lauffer, G. G.	September	23, 1899	Graduate	Independence.		
5838	Lindsay, H. A.	October	4, 1899	By examination	Sabula.		
5853	Leigh, H. J.	October	4, 1899	"	Roland.	Cambridge.	
5861	Lexvold, H. H.	November	9, 1899	"	Pella.		
5862	Langeraht, Henry M.	November	9, 1899	"	Forest City.	Fonda.	
5873	Lowery, John R.	December	6, 1899	"	Marengo.		
5919	Lewis, P. T.	February	6, 1900	"	Des Moines.		
5911	Lyon, Chas. T.	February	6, 1900	"	Clarinda.		
5921	Landford, Edward	February	6, 1900	"	Avoca.		
5968	Linbocker, E. R.	March	3, 1900	"	Owa City.	Readlyn.	
5973	Leavstad, Jno. P.	April	3, 1900	"	Ely.		
6021	Lumason, W. T.	May	1, 1900	"	Davenport.		
6074	Lorenson, Joseph	July	10, 1900	Graduate	Cherokee.	Steamboat Rock.	
6077	Lage, William	July	7, 1900	"	Des Moines.	Minnesota.	
6088	Lyon, Chas. G.	August	7, 1900	"			
6143	Lewis, George N.	October	2, 1900	"			

## ABSTRACT—CONTINUED.

No. of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6215	Long, Fred W.	February	Graduate.	New Vienna.	Clinton.	
6286	Lighthy, J. E.	March	Graduate.	Kesler.		
6287	Louka, Grace	May	Graduate.	Danbury.		
6307	Lindsay, H. H.	August	By examination	Avoca.	Lake View.	
6408	Lusby, E. W.	September	Graduate.	Sioux City.	Westgate.	
6442	Lindbaum, R. H.	October	Graduate.	Eagle Grove.		In Wisconsin.
6509	Loes, John R.	December	Graduate.	Dubuque.		
6516	Littledale, H. H.	January	By examination	Baldwin.		
6526	Lundeen, K.	January	Graduate.	Des Moines.	South Dakota.	
6583	Lloyd, E. W.	January	By examination	Bayard.	Maxwell.	
6588	Lloyd, E. W.	March	Graduate.	Des Moines.		In Wisconsin.
6587	Longnecker, Holton	March	Graduate.	Des Moines.		
6608	Louka, Richard	April	Graduate.	Des Moines.	Colorado.	
6618	Longwell, A. F.	April	Graduate.	Danbury.		
6726	Ladd, J. P.	June	Graduate.	Wellman.		
6801	Long, Chas. F.	August	By examination.	Sioux City.	California.	
6802	Larsen, A. W.	August	By examination.	Whitten.	Fort Dodge.	
6803	Lease, N. J.	August	By examination.	Spencer.		
6804	Lee, Arthur.	August	By examination.	Crawfordville.		
6823	Labbers, Henry	August	Graduate.	Gladbrook.		
6840	Linton, A. W.	October	Graduate.	Des Moines.	Indianola.	
6870	Lynch, W. A.	October	Graduate.	Bayard.	Orange City.	
6882	Living, R. M.	November	By examination	Des Moines.	Bussey.	In Nebraska.
6885	Lee, E. E.	February	Graduate.	Myatic.	Grand Junction.	
6886	Latta, Don.	February	By examination	Chariton.	Murray.	
6882	Lillbridge, C. B.	February	By examination	Manchester.		
6883	Lyons, J. B.	March	Graduate.	Des Moines.	Masonville.	In Illinois.
6877	Leamon, Roy A.	March	Graduate.	Des Moines.		
6883	Lee, S. L.	April	Graduate.	Guthrie Center.		
6886	Lee, C. L.	April	Graduate.	Des Moines.		
6887	Lake, C. J.	April	By examination	Des Moines.		In Wisconsin.
6888	Lindstrom, J. E.	April	By examination	Des Moines.		In Nebraska.
6889	Lonseth, Otto.	April	By examination	Hampden.	Hubbard.	
7087	Lewis, F. O.	April	By examination	Des Moines.		In Nebraska.
7087	Lohman, F. O.	June	By examination	Sioux City.		
7171	Livesey, V. F.	July	By examination.	Schaller.		
7172	Louka, J. A.	October	Graduate.	Whetland.		
			"	Des Moines.	Stanley.	Alabama.
			"	Libertyville.		

7245	Leonhardt, E. P.	December	1, 1903	Graduate	Des Moines.	Indiana.
7246	Lunde, H. C.	February	2, 1904	"	Fort Dodge.	Buffalo.
7247	Luban, Thos.	April	5, 1904	"	Dunlap.	Haynes.
7248	Lyon, H. C.	April	5, 1904	By examination	Emerson.	Elliston.
7249	Lambert, C. M.	April	5, 1904	"	Hampton.	Carlson.
7250	Lee, Amaberg	April	5, 1904	Graduate	Des Moines.	Illinois.
7251	Linden, Gust	May	20, 1904	By examination	Ruthven.	Illinois.
7252	Loesch, H. J.	June	7, 1904	Graduate	Burlington.	Illinois.
7253	Loeltz, M. A.	August	2, 1904	"	Earling.	Ferry.
7254	Lawrence, W. E.	August	2, 1904	"	Des Moines.	New York.
7255	Le Sardo, Antonio.	August	2, 1904	By examination	Gray.	West Side.
7256	Ludwig, Peter.	October	6, 1904	"	Waterloo.	
7257	Ladage, Ed.	December	7, 1905	"	Denison.	Illinois.
7258	Lorenzen, C. P.	February	4, 1905	Graduate	Runnells.	
7259	Lenteman, C. J.	April	23, 1905	"	Denton.	
7260	Lamborn, W. A.	April	23, 1905	"	Keokuk.	
7261	Loomis, C. A.	June	6, 1905	"	Des Moines.	Illinois.
7262	Leichner, E. P.	June	6, 1905	"	Ottumwa.	South Dakota.
7263	Lewis, H. H.	June	6, 1905	By examination	Cedar Falls.	Illinois.
7264	Leachner, E. H.	June	12, 1905	By examination	Des Moines.	Nebraska.
7265	Langerack, B. H.	June	12, 1905	As owner	Pomeroy.	
7266	Long, C. I.	July	4, 1900	"	Antia.	
7267	Loeb, W. D.	July	8, 1899	"	Atlantic.	Grant.
7268	Mullin, M. F.	June	7, 1890	"	Bloomfield.	Ottumwa.
7269	Major, E. E.	June	17, 1890	"	Bloomfield.	Mt. Pleasant.
7270	Montgomery, G. S.	June	17, 1890	"	Casey.	
7271	Mitchell, John H.	July	7, 1890	As assistant	Davenport.	
7272	Mitchell, William S.	June	23, 1890	As owner	Fulton.	
7273	Maulsby, Ellis P.	June	28, 1890	"	Hamburg.	
7274	Maurid, E.	June	7, 1890	"	Decorah.	
7275	Melner, Amilus	June	7, 1890	"	Lansing.	
7276	Morden, W. C.	June	28, 1890	"	Malvern.	
7277	Mann, James	June	7, 1890	"	Boone.	
7278	Montgomery, W. H.	June	28, 1890	As assistant	Des Moines.	
7279	Markley, G. H.	June	28, 1890	As owner	Ossian.	
7280	Mather, William	June	9, 1898	"	Oakaloon.	
7281	Munger, J. P.	June	9, 1898	"	Pleasant Plain.	
7282	Mallory, Dwight	June	2, 1890	"	Palmyra.	
7283	Mallory, Adela	July	2, 1890	"	Charles City.	
7284	Miles, A. H.	July	2, 1890	"	Springdale.	
7285	Miles, O. J.	July	6, 1890	As assistant	Springdale.	
7286	Morgan, J. W.	July	6, 1890	As owner	Silver City.	
7287	Mealy, D. H.	June	4, 1890	"	Iowa City.	
7288	Marietta, J. C.	June	3, 1890	"	Wilton.	
7289	Miles, Wilbur F.	June	4, 1890	"	Atlantic.	
7290	Mather, William	June	6, 1890	"		
7291	Mather, Charles G.	June	11, 1890	"		
7292	Moore, William G.	June	12, 1890	"		
7293	Moon, Milton J.	June	28, 1890	"		
7294	Moore, Milton J.	July	28, 1890	"		
7295	Morrell, J. F.	July	28, 1890	As assistant		
7296	Moncrief, Charles S.	November	15, 1890	By examination		
7297		October	15, 1890			

## ABSTRACT—CONTINUED.

Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
Moore, G. R.	December 6, 1880	By examination	Orford Junction.		
McGeehan, J. E.	December 13, 1880	"	Clarinda		Oklahoma.
McGeehan, J.	April 20, 1881	"	Norwood	Pleasantville.	Kansas.
Merritt, W. H.	April 20, 1881	"	Harford		
Merritt, M. T.	May 27, 1881	"	Woodburn.		
Mitchell, A. L.	April 26, 1881	"	Macdonia		
Maxwell, J. P.	April 26, 1881	"	Westerville	Clearfield.	
Mitchell, E. S.	April 26, 1881	"	Weldon,	Iowa Falls.	
Mitchell, A. F.	November 11, 1881	"	Koets		
Montrose, George D.	August 31, 1882	"	Sioux City.		
Macfarlane, Thomas	January 17, 1883	"	Mendamin.		
Mayer Peter	January 27, 1883	"	Marshalltown.		
Morris, George S.	February 2, 1883	"	Cedar Rapids.		
Mayer, John D.	February 2, 1883	"	Cedar Falls.		
Myers, S. C.	May 29, 1884	"	Schaller	Rossville.	
Myers, L. M.	May 15, 1884	"	Walnut	Manning.	
Mann, A. W.	July 15, 1884	"	Orange City	Onawa.	
Mack, George J.	October 7, 1884	"	Waterloo		
Morgan, Del G.	March 3, 1885	"	Council Bluffs.		
Morgan, Benjamin A.	May 23, 1885	"	Marshalltown.		
Miller, T. L.	May 23, 1885	"	South English.		
More, Charles W.	June 11, 1885	"	Janesville	Murray.	Minnesota.
Macy, Sherman B.	September 7, 1885	"	Bloomfield	Des Moines.	
Myers, W. E.	October 6, 1885	"	New Hampton.	Leon.	
Miller, Severin	January 19, 1886	"	Davenport.	San Francisco Cal.	
Mulnix, J. A.	February 16, 1886	By examination	Dows.		
Moore, Stiles H.	May 17, 1886	Graduate	Sioux City.		
Moore, Arthur J.	May 17, 1886	Graduate	Sioux City.		
Morse, Charles H.	May 17, 1886	Graduate	Eagle Grove		
Merrill, John T.	October 7, 1886	Graduate	Mt. Ayr.		
May, George E.	November 3, 1886	By examination	Charles City.		
Miller, C. E.	November 22, 1886	"	Cedar Rapids	Gritunell	
Maxwell, W. J.	March 30, 1887	"	Avoca.		
Maxwell, W. T.	April 5, 1887	"	Bagley.		
Mason, G. W.	April 16, 1887	"	Goldfield.	Canawha.	
Morgan, Ferd E.	August 18, 1887	"	Cromwell.	Sidney.	
Mullarky, W. G.	January 18, 1888	"	Holland.	Cedar Falls.	

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1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	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## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
4609	Miles, C. W.	March 14, 1904	Graduate	Charles City.		
4617	Merner, D. C.	April 8, 1904	By examination.	Oscar Falls.		
4625	Marsh, Walter K.	April 8, 1904	"	Fairfield.	Oelwein.	Batavia.
4651	Moher, A. H.	May 1, 1904	"	"		
4674	Maher, William F.	May 16, 1903	"	Fort Dodge.		
4687	Morgan, F. B.	May 8, 1904	"	"		
4718	Mullarky, H., Jr.	July 4, 1904	"	Concord Bluffs.		
4740	Mazanti, Henry W.	September 4, 1904	"	Madison.		
4740	Major, Charles W.	May 16, 1903	"	Cedar Falls.		
4815	Miles, Charles L.	November 21, 1904	"	Anita.		
4779	Massenberg, Lou	February 21, 1904	"	Council Bluffs.		
4815	Miles, Charles L.	February 21, 1904	"	Charles City.		
4846	Malden, Walter J.	March 4, 1905	"	Clearfield.	Lenox.	
4846	Miles, C. C.	March 19, 1905	"	Des Moines.	Germania.	
4859	Mulligan, William H.	April 2, 1904	"	Swaledale.		
4902	Murray, Mrs. Mamie E.	April 2, 1904	"	Rudd.	Gray.	
4912	Mertz, C. Eugene	July 6, 1905	"	Lake View.		
4985	Mallory, J. A.	July 1, 1905	"	Linden.		
4947	Moffatt, John H.	October 8, 1905	Graduate	Davenport.		
5041	Munger, D. M.	December 7, 1905	By examination.	Waterloo.	Ogden, Utah.	
5004	Miller, George	April 21, 1906	"	Conrad.	Onslow.	
5070	Mitchell, J. S.	April 5, 1906	"	Cedar Rapids.	Iowa City.	
5071	Moore, C. J.	May 5, 1906	"	Mason.	Fonda.	
5081	Minthorn, Edith.	May 5, 1906	"	Moorehead.	Castana.	
5089	Marshall, O. E.	June 2, 1906	"	Iowa Falls.	Illinda.	
5092	Meade, N. P.	June 2, 1906	"	Akron.		
5108	Mosling, A. D.	June 7, 1906	"	Forest City.	Texas.	
5114	Merritt, F. H.	June 11, 1906	"	Ogden.	Arnold's Park.	
5118	Moore, E. J.	July 1, 1906	"	Eldon.		
5185	Mullarky, E. E.	July 1, 1906	"	Holland.		
5185	Myhite, O. G.	October 10, 1906	"	Betherville.	Manson.	
5170	Martin, Desale	November 1, 1906	"	Jeup.	Silver City, N. M.	
5174	Martin, P. J.	December 1, 1906	"	Lake City.	Nebraska.	
5176	Manton, P. H.	December 1, 1906	"	Lake City.	Waterloo.	
5196	Milz, W. F.	December 1, 1906	"	Charlotte.		
5202	Murray, E. W.	February 2, 1897	"	Janesville.	Oreoso.	
5204	Magee, W. W.	February 2, 1897	"	Melrose.		
5211	Malloy, J. E.	February 2, 1897	"	Dunkerton.		
		March 2, 1897	"	New Hampton.	Austin, Minnesota.	

By examination	Le Mars	Mammon
April 1897	Watcoo	Watcoo
April 1897	Algona	Algona
April 1897	Burlington	Burlington
May 1897	Ackley	Ackley
September 1897	Atunwa	Atunwa
October 1897	Maynard	Maynard
October 1897	Alexander	Alexander
October 1897	Atunwa	Atunwa
November 1897	Beile Plaine	Beile Plaine
March 1898	Seigourney	Seigourney
March 1898	Blanchard	Blanchard
April 1898	Iowa Falls	Iowa Falls
April 1898	Marion	Marion
April 1898	Ottumwa	Ottumwa
April 1898	Central City	Central City
September 1898	White Liberty	White Liberty
September 1898	Ottumwa	Ottumwa
November 1898	Guthrie Center	Guthrie Center
December 1898	Cedar Rapids	Cedar Rapids
January 1899	Des Moines	Des Moines
January 1899	Atlantic	Atlantic
February 1899	Macdonia	Macdonia
February 1899	Des Moines	Des Moines
March 1899	Algona	Algona
April 1899	Cedar Rapids	Cedar Rapids
April 1899	Sioux City	Sioux City
May 1899	Algona	Algona
May 1899	Dubuque	Dubuque
July 1899	Muscatine	Muscatine
July 1899	Des Moines	Des Moines
July 1899	Independence	Independence
July 1899	Maconville	Maconville
August 1899	Des Moines	Des Moines
August 1899	Des Moines	Des Moines
August 1899	Waterloo	Waterloo
August 1899	Charles City	Charles City
September 1899	Des Moines	Des Moines
September 1899	Davenport	Davenport
September 1899	Letta	Letta
September 1899	Waterloo	Waterloo
November 1899	Clarinda	Clarinda
November 1899	Clinton	Clinton
November 1899	Ft. Madison	Ft. Madison
December 1899	Des Moines	Des Moines
January 1900	Lohrville	Lohrville
February 1900	Parkersburg	Parkersburg
February 1900	Villages	Villages
April 1900		

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5984	Morgan, Robt. P.	April 8, 1900	By examination	Council Bluffs.	Nebraska.	
5992	Middleworth, W. C.	June 1, 1900	Graduate	Mt. Ayr.		
6008	Miller, F. William.	June 1, 1900	"	Horstead.		
6009	Metkel, Carl D.	June 1, 1900	"	Charles City.	Washington.	
6020	Marcy, Frank L.	May 1, 1900	"	Mayton.	Belle Plain.	
6080	Mages, Samuel R.	July 8, 1900	"	Iowa Falls.		
6108	Manson, Chas. H.	August 7, 1900	By examination	Boone.		
6110	Masters, Stephen A.	August 7, 1900	"	Des Moines.	Colorado.	
6121	Miller, Carl F. T.	September 4, 1900	Graduate	Valley Junction.		
6188	Mathes, Geo. A.	October 2, 1900	"	Fontanelle.	Stuart.	
6145	Maulsby, W. A.	October 2, 1900	"	Earlham.	Lanesboro.	
6181	Moskopy, Albert.	December 4, 1901	By examination	Conrad.	Minnesota.	
6188	Millen, Willis L.	December 4, 1901	"	Gaiva.	Bedford.	
6901	Masten, Willis A.	December 4, 1901	As assistant	Greenfield.		
6356	Meyers, Willis A.	December 4, 1901	By examination	Grinnell.		
6359	Mortland, Arthur C.	February 1, 1901	Graduate	Davenport.	Ohio.	
6343	Medowell, Harry.	March 1, 1901	By examination	Crystal Lake.		
6387	Mortensen, Frank E.	March 1, 1901	By examination	Britt.		
6370	Morgan, John W.	May 7, 1901	Graduate	Ames.	Clarion.	
6372	MacK, Chas. L.	May 7, 1901	"	Council Bluffs	Nebraska.	
6806	Morrison, W. H.	May 7, 1901	By examination	Monroe.	Jamaica.	
6854	Morgan, T. W.	May 4, 1901	"	Edgewood.	Indiana.	
6889	Malers, J. A.	June 4, 1901	"	Luxemburg.	Monona.	
6877	Macey, M. W.	June 4, 1901	"	Whitewater.	Arion.	
6899	Martin, S. J.	August 2, 1901	Graduate	Cedar Falls.		
6408	Miller, E. J.	August 2, 1901	By examination	Des Moines.	Valley Junction.	
6407	Mabann, F. A.	September 2, 1901	Graduate	Victor.	Colorado.	
6420	Miller, H. J.	September 2, 1901	By examination	Corringtonville.	Quincy.	
6437	Mundie, J. D.	September 8, 1901	"	Corning.		Nebraska.
6483	Morris, C. L.	October 1, 1901	Graduate	Carson.	Wlots.	
6439	Murphy, F. R.	October 1, 1901	"	Waterloo.		
6449	Mundt, W. B.	October 1, 1901	"	Council Bluffs.		Indiana.
6476	Miller, W. B.	November 8, 1901	By examination	Ackley.		
6510	Wachtelmann, H. W.	December 8, 1901	"	Elgin.		
6577	Mason, C. J.	February 4, 1902	"	Hannibal.		
6578	Martin, Geo. H.	March 4, 1902	"	Des Moines.	Colo.	
6578	Mitchell, Edward.	March 4, 1902	"	Des Moines.	Davenport.	Missouri.

6901	Mills, E. O.	April	1, 1903	Graduate	Ossian	Cooper	Michigan.
6902	Martin, W. K.	April	1, 1903	By examination	Jefferson	Abron.	
6903	March, W. L.	April	1, 1903	"	Cedar Falls		
6904	Morgan, A. W.	April	1, 1903	"	Muscatine		
6905	Morgan, A. W.	May	6, 1903	"	Gilmore City		
6906	Morgan, A. W.	June	8, 1903	"	Rhodes	Blairburg.	
6907	Morgan, A. W.	June	20, 1903	"	Sioux City		
6908	Morgan, A. W.	July	3, 1903	By examination	Cedar Rapids	Hazleton.	
6909	Morgan, A. W.	August	5, 1903	Graduate	Loita Creek	Arcoa.	
6910	Morgan, A. W.	August	5, 1903	"	Des Moines	Laurel.	
6911	Morgan, A. W.	August	5, 1903	"	Manchester	Monmouth.	
6912	Morgan, A. W.	August	5, 1903	"	Des Moines		Minnesota.
6913	Morgan, A. W.	August	5, 1903	By examination	Mount Union	Fort Madison.	
6914	Morgan, A. W.	August	5, 1903	Graduate	Pleasantville	Harvey.	
6915	Morgan, A. W.	August	21, 1903	"	Leon		
6916	Morgan, A. W.	October	7, 1903	"	Ocheyedan		Illinois.
6917	Morgan, A. W.	October	7, 1903	By examination	Hampton		
6918	Morgan, A. W.	October	7, 1903	Graduate	Des Moines		Minnesota.
6919	Morgan, A. W.	November	8, 1903	"	Cedar Rapids	Lorimer.	
6920	Morgan, A. W.	February	8, 1903	By examination	Sioux City	Marcus.	
6921	Morgan, A. W.	March	8, 1903	Graduate	Council Bluffs		
6922	Morgan, A. W.	April	7, 1903	"	Belmont		
6923	Morgan, A. W.	April	7, 1903	"	Des Moines		Minnesota.
6924	Morgan, A. W.	April	7, 1903	By examination	Aurora		
6925	Morgan, A. W.	July	1, 1903	Graduate	Davenport	Maryland.	
6926	Morgan, A. W.	August	4, 1903	"	Cherokee		
6927	Morgan, A. W.	October	6, 1903	"	Fort Dodge	Alabama.	
6928	Morgan, A. W.	October	6, 1903	"	Council Bluffs	Indiana.	
6929	Morgan, A. W.	October	6, 1903	"	Colorado	La Porte.	
6930	Morgan, A. W.	October	6, 1903	"	Des Moines	Hedrick.	
6931	Morgan, A. W.	October	6, 1903	"	Council Bluffs	Illinois.	
6932	Morgan, A. W.	November	2, 1903	"	Des Moines	Menlo.	
6933	Morgan, A. W.	November	2, 1903	"	Des Moines		
6934	Morgan, A. W.	December	1, 1903	"	Des Moines	Indiana.	
6935	Morgan, A. W.	December	1, 1903	"	Des Moines	North Dakota.	
6936	Morgan, A. W.	February	2, 1904	"	Sioux City	Nebraska.	
6937	Morgan, A. W.	February	2, 1904	"	Cascade		
6938	Morgan, A. W.	February	2, 1904	"	Waterloo		
6939	Morgan, A. W.	February	2, 1904	"	Des Moines		
6940	Morgan, A. W.	February	2, 1904	"	Sioux City	Oklahoma.	
6941	Morgan, A. W.	February	2, 1904	By examination	Dows		
6942	Morgan, A. W.	February	2, 1904	Graduate	Des Moines	Mason City.	
6943	Morgan, A. W.	February	2, 1904	By examination	Des Moines		
6944	Morgan, A. W.	February	2, 1904	"	Council Bluffs		
6945	Morgan, A. W.	February	2, 1904	"	Monmouth	Moravia.	
6946	Morgan, A. W.	February	2, 1904	Graduate	Shell Rock	Cedar Falls.	
6947	Morgan, A. W.	February	2, 1904	"	Ft. Madison		
6948	Morgan, A. W.	February	2, 1904	By examination	Des Moines		
6949	Morgan, A. W.	February	2, 1904	Graduate	Charles City		

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
7431	Muegge, N. A.	July 1, 1904	Graduate	Elkhart	Des Moines.	
7445	Mealey, J. A.	July 1, 1904	By examination	Elkhart	Des Moines.	
7470	Miller, J. E.	August 2, 1904	"	Alton	Ames.	
7471	Munch, L. C.	August 2, 1904	"	Whitemore	"	
7505	Meisner, Otto.	August 2, 1904	Graduate	Davenport.	Mason City.	
7518	Malloy, G. C.	October 4, 1904	"	New Hampton.	Indiana.	
7543	Manning, C. O.	December 6, 1904	"	Des Moines.	"	
7549	Mulnix, W. H.	December 6, 1904	By examination	Des Moines.	Shenandoah.	
7569	Moore, B. R.	December 6, 1904	"	Dowa.	"	
7571	Moore, R. H.	February 7, 1905	Graduate	Gravely.	"	
7591	Mick, F. L.	February 7, 1905	"	Buena Vista.	"	
7603	Morgan, C. H.	April 4, 1905	By examination	Iowa City	Grafton.	
7630	Miller, W. B.	June 6, 1905	"	Mt. Airy.	"	
7651	Mendenhall, D. G.	June 19, 1905	Graduate	Des Moines.	"	
7661	Morris, W. G.	June 19, 1905	"	Des Moines.	"	
7663	Mallett, F. A.	June 19, 1905	"	Des Moines.	"	
7668	Mallett, F. A.	June 19, 1905	"	Des Moines.	"	
7684	Moore, H. M.	July 12, 1905	By examination	Iowa City	Pennsylvania.	
7707	Miller, Raymond	July 12, 1905	Graduate	Brayton.	"	
7714	Manley, E. E.	August 1, 1905	"	Sloan	"	
7725	Maxwell, G. C.	August 1, 1905	"	Oakland	"	
7737	Marmaduke, V. G.	August 1, 1905	"	Des Moines.	Colorado.	
7744	Manck, H. O.	August 1, 1905	"	Des Moines.	Garwin.	
7760	Middleworth, D. W.	August 1, 1905	"	Des Moines.	Boone.	
185	McKenzie, H. M.	August 1, 1905	By examination	Mt. Airy	"	
189	McKenzie, H. M.	August 1, 1905	As owner	Elwood	"	
800	McAhran, W. H.	June 4, 1900	As assistant	Bloomfield	"	
805	McAhran, W. M.	June 4, 1900	"	Centerville.	"	
806	McCreary, T. J.	June 4, 1900	As owner.	Keokuk	"	
806	McCreary, T. J.	June 4, 1900	"	Keokuk	"	
1673	McEwen, C. A.	July 20, 1890	By examination	Albia	Illinois.	
1673	McDonald, J. W.	August 18, 1890	"	Albia	Oakalea.	
1678	McLain, George H.	October 21, 1890	"	Morning Sun	Los Angeles.	
3195	McLain, George H.	June 18, 1891	"	Vall	Algona.	
3165	McElwain, W. H.	June 18, 1891	"	Clarksville	Nebraska.	
3165	McGondrie, W. A.	June 11, 1891	"	Monona	Muscatine.	
3205	McDermid, D. Jr	July 7, 1891	"	Victor	"	
3215	McColm, J. T.	October 24, 1891	"	Gravely	"	
3205	McClees, O. H.	April 11, 1893	"	Marne	"	

2409	McColm, C. B.	April	8, 1892	By examination	Hepburn	Perris.
2476	McClintock, J. M.	June	9, 1892	"	Ames	Florence, Kan.
2561	McBride, H. E.	February	6, 1893	"	Amos	Des Moines.
2571	McFarlain, Thomas	January	27, 1893	"	Bondamin.	Idaho.
2578	McBride, C. M.	February	26, 1893	"	Rock Valley.	Fullerton, Neb.
2778	McMillan, E. O.	July	15, 1894	"	Ocon Rapids.	Fort Dodge.
2865	McNamara, J. F.	October	16, 1895	"	Des Moines.	
2869	McFarland, A. W.	January	6, 1896	"	Des Moines.	
2973	McKay, Frank F.	September	16, 1896	"	Des Moines.	
3127	McKay, E. A.	March	1, 1897	"	Des Moines.	
3170	McKinnis, C.	March	1, 1897	"	Missouri Valley.	
3249	McWilliams, J. J.	May	17, 1897	"	Charter Oak.	
3249	McBride, R. W.	February	17, 1898	"	Marshalltown.	
3249	McKibben, C. A.	March	25, 1898	Graduate	Bloomfield	Mt. Sterling.
3257	McClintock, George	September	6, 1898	By examination	Humeston.	
3732	McClintock, George	September	17, 1899	"	Perris	Gravely.
3903	McColm, J. G.	April	21, 1899	"	Independence	Water City.
4047	McDonnell, P. E.	June	24, 1891	"	Independence	Marion City.
4087	McClure, Maria O.	May	2, 1891	"	Greenfield	Kansas.
4105	McClure, Maria O.	July	2, 1891	"	Greenfield	Brann.
4183	McClure, Maria O.	September	2, 1891	Graduate	La Porte	Groene, Neb.
4243	McClure, Maria O.	November	2, 1891	By examination	Belle Plaine	Schleswig.
4299	McClure, Maria O.	February	7, 1892	By examination	Des Moines.	Afton.
4322	McClure, Maria O.	July	2, 1892	"	Shellsburg.	
4381	McClure, Maria O.	August	4, 1892	"	Grinnell	
4409	McClure, Maria O.	October	4, 1892	"	Des Moines.	West Union.
4438	McClure, Maria O.	March	4, 1893	"	Cedar Rapids.	Delmar.
4448	McClure, Maria O.	April	21, 1893	"	Rock Valley.	
4453	McClure, Maria O.	May	2, 1893	"	Lost Nation.	
4459	McClure, Maria O.	May	25, 1893	"	Seymour.	
4463	McClure, Maria O.	May	30, 1893	"	Des Moines.	Olin.
4481	McClure, Maria O.	October	8, 1893	"	Cascade	Lohrville.
4548	McClure, Maria O.	November	28, 1893	"	Des Moines.	
4611	McClure, Maria O.	March	6, 1894	"	Clare	Marshalltown.
4687	McClure, Maria O.	April	17, 1894	"	Lost Nation.	Humeston.
4690	McClure, Maria O.	June	5, 1894	"	Des Moines.	Spirit Lake.
4697	McClure, Maria O.	May	6, 1894	"	Vinton	Perry.
4762	McClure, Maria O.	October	24, 1894	"	Fontanelle	Forest City.
4841	McClure, Maria O.	March	12, 1895	"	Oreston	Rockford.
4872	McClure, Maria O.	April	29, 1894	"	Ainsworth	Garner.
4964	McClure, Maria O.	October	1, 1895	"	Reidding	
5014	McClure, Maria O.	November	6, 1895	"	Le Mars	
5014	McClure, Maria O.	March	8, 1896	"	Buffalo Center	
5189	McClure, Maria O.	April	14, 1897	"	Marble Rock	
5191	McClure, Maria O.	January	14, 1897	"	Victor	
5298	McClure, Maria O.	July	6, 1897	"	Emerson	
5320	McClure, Maria O.	September	7, 1897	"	Centerville	

In Colorado,

## ABSTRACT—CONTINUED.

Number of Certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5381	McAdams, A. E.	January 4, 1898	By examination	Des Moines	Gilbert Station.	
5392	McMullen, F. A.	February 1, 1898	"	New Hampton	Independence.	
5457	McColin, C. W.	April 5, 1898	"	College Springs.		
5453	McPhersons, S. E.	April 5, 1898	"	College Springs.	Harlan.	
5446	McPhersons, B. B.	April 5, 1898	"	Wellsburg		
5476	McLaughlin, W. H.	April 5, 1898	"	Wellsburg		
5506	McNannara, F. H.	June 5, 1898	"	Wellsburg		
5530	McEvoy, M. T.	July 28, 1898	Graduate	W. Dodge.	Humboldt.	
5597	McGready, A. R.	September 7, 1898	"	Hastings	Mondamin.	
5696	McMackin, F. G.	November 1, 1898	By examination	Des Moines		
5665	McCombs, Amantus	November 4, 1898	Graduate	Des Moines		
5724	McLaughlin, C. J.	April 17, 1899	"	Des Moines		
5738	McCoy, Charles B.	May 6, 1899	"	Brooklyn	West Union.	
5803	McFadden, William	July 1, 1899	"	Des Moines	Oxford.	
5855	McAfee, Vesta J. A.	August 5, 1899	"	Des Moines	Oakdale.	
5855	McCluskey, John A.	September 9, 1899	"	Granger	Rockne, Ill.	
5892	McDonald, John A.	November 2, 1900	By examination	Glenwood	Yale.	
5987	McDonald, Andrew	January 8, 1900	"	Ehler	Tama.	
6042	McCurran, A. A.	April 5, 1900	"	Des Moines	Kirkman.	
6042	McFarland, Virgil	January 8, 1900	"	Sioux City		
6096	McKibben, R. G.	August 7, 1900	Graduate	Des Moines	Wellsville, Mo.	
6105	McCann, H. Edwin	August 7, 1900	"	Van Horn	Idaho.	
6116	McGuire, J. Leonard	September 8, 1900	"	Goodell		
6176	McKeever, R. B.	September 8, 1900	By examination	Ossola.	Woodburn.	
6189	McOall, C. A.	December 8, 1900	"	Spencer	Algona.	
6217	McDonald, D. J.	February 2, 1901	Graduate	Sioux City.	Jackson, Neb.	
6261	McMickle, S. L.	April 2, 1901	Graduate	Maquoketa.	Yetter.	
6283	McMurray, Charles.	June 7, 1901	Graduate	Maquoketa.		
6285	McNiven, James	June 7, 1901	Graduate	Glenwood	Illinois.	
6296	McFarland, Robert.	May 7, 1901	Graduate	Dubuque		
6336	McGuan, Charles W.	June 4, 1901	By examination	Lowa City.		
6343	McMullen, George W.	June 2, 1901	Graduate	New Hampton.		
6348	McWilliams, C. T.	July 2, 1901	By examination	Postville.	Chester.	
6391	McConoughy, E. H.	August 2, 1901	Graduate	Grant.	Blanchard.	
6440	McKinty, W. N.	October 1, 1901	Graduate	La Porte.	Cedar Rapids.	
6527	McCarroll, Frank L.	November 6, 1902	Graduate	Des Moines.	Belmond.	
6532	McDonnell, J. E.	March 4, 1902	Graduate	Williamsburg.	Mechanicsville.	
6566	McEnree, Geo. A.	May 5, 1902	Graduate	Sioux Rapids	Des Moines.	

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## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
4081	Nelson, O. H.	June 26, 1901	By examination.	Des Moines.	Guthrie Center.	
4089	Ney, Robert J.	July 7, 1901	"	Spencer.	Paulina.	
4094	Nig, Henry A.	December 18, 1902	"	Merrill.	Hubbard.	
4075	Nig, Mike.	June 22, 1903	"	Akeley.		
4291	Nichols, C. Ellis.	September 23, 1903	"	Sioux City.	Corwith.	
4549	Nichols, William.	November 23, 1903	"	Britt.		
4613	Nichols, Charles N.	March 15, 1904	"	Bedford.		
4695	Nichols, J. D.	July 8, 1904	By examination.	Humboldt.		
4734	Nichols, Charles T.	September 4, 1904	"	Marshalltown.	Forest City.	
4775	Nichols, O. F.	November 13, 1904	"	Panora.	St. Anthony.	
4776	Nichols, Roy O.	August 9, 1905	"	Oreco.	Des Moines.	
4916	Norton, N. L.	December 10, 1905	"	Marathon.	Jefferson.	
4959	Nolan, G. R.	April 21, 1906	"	Ruthven.	Albert City.	
5092	Nicola, F. F.	May 6, 1906	"	Danbury.	Pearson.	
5096	Nicola, F.	June 2, 1906	"	Stanwood.		
5093	Newman, Orace.	August 4, 1906	"	Alburnetta.	Wall Lake.	
5130	Northaus, C. A.	October 28, 1906	Graduate.	Oreston.		
5158	Nietert, Wm. G.	March 31, 1908	By examination.	Blanchard.	Modale.	
5483	Nixon, Robert B.	March 27, 1908	Graduate.	Des Moines.		
5415	Nesting, C. O.	July 7, 1909	By examination.	Ottumwa.		
5695	Nordgren, E. E.	March 7, 1909	"	Ottumwa.		
5642	Nollen, J. H.	August 1, 1909	Graduate.	Pella.	Lovila.	
5768	Noon, Edw. A.	September 5, 1909	"	Rockwell.	Newton.	
5906	Nelson, John C.	September 5, 1909	"	Aurelia.	Pennsylvania.	
5816	Nelson, O. E.	December 5, 1909	By examination.	Des Moines.		
5878	Nyquist, John.	January 2, 1900	"	Clinton.	North Dakota.	
5993	Nyquist, Peter J.	August 7, 1900	"	Bancroft.		
6094	Nichols, Frank J.	September 4, 1900	Assistant.	Lansing.		
6187	Schwartz, Frank J.	February 5, 1901	By examination.	Atlantic.		
6229	Namur, Geo. T.	July 2, 1901	"	Sigourney.		
6351	Namur, Glenn W.	January 4, 1902	"	Lake Mills.	Thorp.	
6484	Nerby, Olat E.	February 4, 1902	"	Des Moines.	Wisconsin.	
6549	Noble, S. C. H.	March 4, 1902	By examination.	Algona.		
6568	Norton, Guy J.	April 1, 1902	Graduate.	Livermore.	Humboldt.	
6580	Norton, G. O.	April 1, 1902	Graduate.	Iowa City.	Jamaica.	
6604	Norton, G. O.	April 1, 1903	"	"		
6619	Nixon, A. W.	April 1, 1903	"	"		

6708	Norton, R. A.	June	8, 1902	Graduate	Grafton	Matlock.	Wisconsin.
6818	North, H. B.	August	21, 1902	"	Dubuque	"	Indiana.
6819	Neufeld, Frank	August	21, 1902	"	Davenport	"	"
6923	Nickel, Arthur	February	3, 1903	By examination	Des Moines	"	"
6965	Newman, W. L.	February	3, 1903	"	Marshalltown	"	"
6966	Noble, Chas. W.	February	3, 1903	"	Dulais	"	"
6974	Nysae, P. N.	March	14, 1903	Graduate	Sioux	Avery.	"
7001	Nicks, Frank J.	April	7, 1903	By examination	West Point	Burlington.	"
7060	Nixon, S. R.	July	1, 1903	Graduate	Rockwell City	Glenwood.	"
7080	Neely, J. W.	August	1, 1903	"	Des Moines	"	"
7191	Nugent, E. J.	October	6, 1903	By examination	Guthrie Center	Menlo.	"
7265	Nerby, B. L.	December	7, 1903	"	Lake Mills	"	"
7415	Newell, J. S.	July	7, 1904	Graduate	Waverly	"	"
7419	Novak, J. H.	July	1, 1904	"	Iowa City	"	"
7593	Norgaard, J. J.	February	7, 1905	By examination	Harlan	"	"
7689	Nichols, J. G.	July	12, 1905	Graduate	Belle Plaine	"	"
7740	N-leon, L. L.	August	1, 1905	"	Woodbine	"	"
374	Oney, Arthur R.	June	10, 1890	As owner	Clinton	"	"
420	Omer, Frederick	June	12, 1890	As assistant	Des Moines	"	"
951	Ormistead, Earl N.	June	11, 1890	As owner	New Hampton	"	"
1118	Oils, Clarence M.	July	7, 1890	As assistant	Chilesa	Hartwick.	"
1294	Osborn, Benjamin F.	July	7, 1890	"	Tabor	"	"
1402	Osborn, Olaf M.	December	15, 1890	By examination	Rippey	"	"
1939	Owen, N. Eugene	October	15, 1890	"	Fort Dodge	"	"
2233	Owens, M. V.	October	4, 1891	"	Oskaloosa	"	"
2291	Olive, Edwin A.	November	28, 1891	"	Farley	Dubuque.	"
2543	Osborne, G. S.	October	6, 1892	"	Bayard	Scranton.	"
2836	O-hiltree, V. B.	April	7, 1895	"	Liverton	Missouri Valley.	"
3027	Owen, C. N.	June	15, 1891	"	Keokuk	"	"
3107	Olive, Conrad J.	December	17, 1896	"	Marion	"	"
3475	Olive, L. C.	June	18, 1898	"	Des Moines	"	"
3486	O'donne, Ben G.	June	11, 1898	"	Scranton	"	"
3545	Ogg, John J.	January	29, 1899	"	Des Moines	Oelwein.	"
3539	Overfield, E. E.	February	15, 1899	"	Lime Springs	"	"
3537	Oet, John R.	February	12, 1899	"	Euna	"	"
3806	O'Reilly, William F.	July	12, 1899	Graduate	Wa-hington	Mt. Pleasant.	"
3955	Owen, Luther P.	November	8, 1899	By examination	Keokuk	"	"
4039	Osborne, E. A.	March	30, 1901	"	Marion	"	"
4221	Olinger, William	February	1, 1902	"	Cedar Rapids	Indianola.	"
4442	Oatcraden, A. R.	December	6, 1892	"	Thayer	Colorado.	"
4442	Overton, W. T.	May	2, 1893	"	Grinnell	In Oklahoma.	"
4465	Ormsby, F. E.	June	6, 1893	"	Hampton	"	"
4485	Oney, V. L.	July	20, 1893	"	Marquette	Geneva.	"
4533	Owens, Frank	July	11, 1893	"	Shell Rock	"	"
4594	Owens, Nat	April	7, 1895	"	Bloomfield	"	"
4685	Olive, Richard W.	February	1, 1895	"	Scranton	Prarie City.	"
4685	O'ring, Richard W.	March	27, 1895	"	Ekader	"	"
4678	O'Day, J. W.	May	7, 1895	"	Danbury	"	"
4918	Ocker, Leroy M.	August	6, 1895	"	Toledo	Charl n.	"

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5009	Oelke, W. C.	March 17, 1896	By examination.	Goldfield.	Corwith.	
5054	Olinger, J. B.	April 21, 1896	Graduate.	Maxwell.	Oedar Falls.	
5060	Oard, A. W.	June 2, 1896	By examination.	Fort Dodge.	Chitumwa.	
5084	Orr, A. L.	June 2, 1896	"	Mystic.	Waterloo.	
5184	O'dway, J. C.	January 1, 1897	"	New Hartford.	.....	
5218	O'len, George.	May 1, 1897	"	Burlington.	.....	
5363	O'Malley, J. E.	February 1, 1898	"	Ferry.	.....	
5409	O'Leary, Mike.	March 1, 1898	"	Woodbine.	.....	
5453	O'Day, I. J.	March 1, 1898	"	Canbury.	.....	
5473	O'Connor, T. E.	September 1, 1898	Graduate.	George.	.....	
5477	Oit, C. A.	October 1, 1898	"	St. Pleasant.	.....	
5497	O'Connell, T. G.	August 1, 1899	By examination.	Maloy.	Imogene.	
5509	O'Connell, J. S.	August 1, 1899	"	Des Moines.	.....	
5518	O'Connell, F.	September 1, 1899	Graduate.	Badger.	.....	
5610	O'Connell, David D.	September 1, 1899	By examination.	Adley.	Allison.	
6110	Opper, John C.	May 1, 1900	Graduate.	New Albin.	Waukon.	
6119	Orange, M. D.	September 1, 1901	"	Centerville.	.....	
6297	O'Quinn, O. E.	January 1, 1901	By examination.	Hubbard.	Lemart.	
6344	O'Mara, George R.	August 1, 1901	Graduate.	Elma.	South Dakota.	
6401	O'Malley, W. F.	September 1, 1901	"	Parry.	North Dakota.	
6457	Olsen, T. O.	December 22, 1901	"	St. Mary.	.....	
6557	Olsen, B. S.	January 22, 1902	"	St. Mary.	.....	
6554	Oster, F. H.	July 1, 1902	By examination.	Ota.	Brenson.	
6654	Oster, B. L.	October 1, 1902	Graduate.	Dubuque.	.....	
6803	Osweller, Albert.	December 2, 1902	By examination.	Adrian.	Valley Junction.	
7122	Oswander, W. H.	August 1, 1903	Graduate.	Stuart.	South Dakota.	
7245	Olson, H. O.	December 1, 1903	"	Des Moines.	.....	
7356	Olcum, G. H.	December 1, 1903	By examination.	Oedar Rapids.	.....	
7389	Orth, L. P.	April 1, 1904	Graduate.	Clarinda.	.....	
7386	Osborn, E. O.	April 1, 1904	By examination.	Knorrville.	.....	
7379	O'Harrow, R. E.	May 20, 1904	Graduate.	Des Moines.	.....	
7380	O'Leary, A. J.	May 20, 1904	"	Dubuque.	.....	
7478	Ovshaker, R. L.	August 1, 1904	By examination.	Correctionville.	.....	
7716	Orakhood, E. W.	August 1, 1905	Graduate.	St. Mary.	.....	
7722	Orla, R. W.	August 1, 1905	"	Earham.	.....	

122	Peters, C. W.	June	15, 1890	As owner	Ft. Madison.	
431	Parker, J. H.	June	22, 1890	"	Des Moines.	
637	Parker, John	June	7, 1890	As assistant	Mt. Pleasant.	New London.
836	Pyle, Samuel M.	June	1, 1890	As owner	McGregor.	
838	Peterson, S. J.	June	30, 1890	"	Newtown.	
821	Parmenter, R. F.	June	8, 1890	As assistant	Marshalltown.	
1181	Powers, George P.	July	10, 1890	As owner	Sibley.	
1291	Pond, A. William L.	June	10, 1890	As owner	West Liberty.	
1293	Parler, C. B.	June	4, 1890	As assistant	Dubuque.	
1299	Porter, Edwin C.	June	7, 1890	"	Brooks.	
1588	Porter, Edwin C.	August	6, 1890	"	Wapello.	
1714	Porter, Edwin C.	September	28, 1890	By examination	Des Moines	Stratford.
1668	Putt, H. C. O. Peter	July	30, 1890	"	Kirkville.	
1949	Putnam, T. L.	January	29, 1891	As assistant	Kirkville.	Salem.
1944	Pierce, G. B.	June	29, 1891	By examination	Peterson	Sutherland.
3156	Parker, E. W.	February	27, 1892	"	Pocahontas Center.	Des Moines.
2940	Patterson, C. F.	April	28, 1892	"	Moravia.	Monkton.
2415	Powers, C. A.	September	5, 1892	"	Oreco.	Ridgeway.
2931	Praun, A. W.	December	1, 1892	"	Manson.	Eagle Grove.
2550	Parker, L. T.	March	2, 1893	"	Harlan.	
2952	Paxton, J. F.	September	9, 1893	"	Muscatine.	
2737	Pentzer, J. L.	April	26, 1894	"	Iowa City	Okauchosa.
2756	Pickett, John H.	May	8, 1895	"	Spencer	Rock Valley.
2855	Pember, H. H.	February	1, 1895	"	Riverton.	Shenandoah.
2918	Putnam, T. L.	September	1, 1895	"	Okauchosa.	
2940	Pike, Charles C.	November	4, 1895	"	Red Oak.	
3912	Platt, George M.	November	11, 1895	"	Ida Grove	Davenport.
8154	Putzler, Henry J.	February	25, 1897	"	Dubuque.	Minnesota.
8157	Palen, Joseph A.	February	25, 1897	"	Gladibrook.	Blairtown.
8180	Putnam, J. M.	March	18, 1897	"	Paulina.	Oedar Falls.
8357	Paul, B. F.	June	7, 1897	"	Le Mars.	
8295	Pfeiffer, H. Jacob.	August	17, 1897	"	Forest City.	Linnville.
8299	Pinkney, E. A.	August	18, 1897	"	Perru.	In Missouri.
8418	Painter, William	March	20, 1898	"	Parkersburg	
8423	Pfeiffer, Paul M.	March	20, 1898	"	Shambaugh.	Corning.
8453	Potter, F. E.	May	1, 1898	"	Wankon.	
8489	Pratt, Arthur E.	August	7, 1898	"	Sloan	In Colorado.
3494	Phillips, Clyde C.	February	7, 1899	"	West Union.	
3526	Phillips, E. M.	March	27, 1899	"	Olin	(Olin only).
3576	Port, Frank W.	June	11, 1899	"	Vall.	Marcus.
3684	Potts, Fred E.	July	8, 1899	"	Unionville	Garden Grove.
3726	Potts, Harry W.	September	4, 1899	"	Carroll.	Penda.
3897	Patt, C. C.	April	1, 1900	"	Cedar Falls.	Oklahoma Territory.
3935	Pfeiffer, G. A.	April	1, 1900	"	Britt	
3914	Perry, Chas. H.	April	22, 1890	"	Grinnell	
3914	Peck, Sennan Z.	July	25, 1890	"	Cedar Rapids.	
3934	Pitkin, F. O.	July	25, 1890	"	Oedar Rapids.	
3937	Parsons, Charles E.	September	6, 1890	"	Adair	Atlantic.
4090	Parsons, Miss E. S.	November	21, 1891	"		

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
4051	Park, L. E.	May 7, 1891	By examination	Tracy, Mo.	Krook.	
4059	Pearson, L. W.	June 2, 1891	"	St. Louis.	St. Louis.	
4071	Perkins, C. W.	July 1, 1891	"	St. Louis.	St. Louis.	
4082	Pendergast, C. F.	August 1, 1891	"	St. Louis.	St. Louis.	
4094	Pennington, C. S.	September 1, 1891	"	St. Louis.	St. Louis.	
4104	Pennsylvania, William	October 1, 1891	"	St. Louis.	St. Louis.	
4279	Peterson, J. O.	January 20, 1892	"	St. Louis.	St. Louis.	
4315	Pettit, Jesse O.	February 13, 1892	"	St. Louis.	St. Louis.	
4345	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4384	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4421	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4478	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4512	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4534	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4612	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4635	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4643	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4653	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4683	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4691	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4698	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4743	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4760	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4832	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4928	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4976	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
4988	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5049	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5092	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5097	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5185	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5217	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5230	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5310	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5341	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5421	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5425	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	
5483	Phelan, A. H.	February 28, 1893	"	St. Louis.	St. Louis.	

3294	Peterson, O. V.	July	6, 1897	By examination	Dayton	Lehigh, Ft. Dodge.	California.
3295	Peterson, A. O.	September	7, 1897	"	Gowrie.	"	"
3316	Palmer L. L.	March	1, 1898	"	Paton.	"	"
3417	Peet, R. W.	March	1, 1898	"	Svea City.	"	"
3418	Phillips, W. C.	March	1, 1898	"	Clarinda.	"	"
3436	Phillips, Mrs. N. W.	March	10, 1898	"	Fertile Junction.	Hanlontown, Fort Madison.	"
3483	Park, C. G.	March	31, 1898	Graduate	Willon City.	"	"
3525	Pinckney, Edwla.	July	7, 1898	By examination	Forest City.	"	"
3529	Pryon, E. P.	July	7, 1898	"	Dubuque.	"	"
3531	Priest, F. H.	August	2, 1898	"	Hatting.	Buckeye.	California.
3539	Pickertill, J. R.	September	2, 1898	Graduate	Des Moines.	"	"
354	Porter, G. E.	October	4, 1898	By examination	Marshalltown.	"	"
3567	Porter, J. E.	October	4, 1898	"	Des Moines.	"	"
3569	Porter, G. F.	December	6, 1898	"	Gradbrook.	"	"
3590	Porter, G. F.	April	4, 1899	"	Bridge Water.	"	"
3594	Porter, P. F. W.	July	6, 1899	Graduate	Westfield.	South Dakota.	"
3774	Porter, George E.	August	1, 1899	"	Des Moines.	Renwick.	"
3775	Potkins, C. M.	August	1, 1899	"	Des Moines.	Colorado.	"
3745	Powell, Preston.	August	1, 1899	By examination	Belle Plaine.	"	"
3872	Powell, J. F.	December	5, 1899	Graduate	Alair.	Neola.	"
3901	Paulin, J. F.	February	6, 1900	By examination	Oakland.	"	"
3924	Parr, Anthony L.	February	6, 1900	"	Albia.	"	"
3940	Parr, Jesse B.	March	6, 1900	"	Rhodes.	Oelwein.	"
3941	Pattin, Barton L.	March	6, 1900	"	Woodbine.	Missouri Valley.	"
3943	Patterson, Roy S.	March	6, 1900	"	Marshalltown.	Davenport.	"
3981	Pyle, Will M.	March	8, 1900	"	Marshalltown.	Ft. Dodge.	"
3982	Parker, Fred O. Jr.	April	3, 1900	"	Ireton.	Maurice.	"
4025	Patterveld, Wm. T.	April	3, 1900	"	Dubuque.	"	In California.
4033	Parker, Robt. L.	May	1, 1900	Graduate	Modale.	"	"
4037	Paine, G. W.	June	5, 1900	"	Burt.	Algona.	"
4041	Phileo, Addison E.	June	5, 1900	By examination	Des Moines.	"	"
4058	Preston, P. A.	June	5, 1900	"	Calmar.	"	"
4070	Pyle, Frank S.	July	8, 1900	"	Mt. Pleasant.	"	"
6111	Parker, G. L.	August	7, 1900	"	Des Moines.	Independence.	In Ohio.
6141	Peterson, H. B.	October	2, 1900	Graduate	Cedar Rapids.	"	"
6149	Pearls, Rudate B.	October	2, 1901	"	Oscola.	"	In Indiana.
6206	Pitt, J. Otto	January	1, 1901	"	Des Moines.	"	"
6218	Prabe, Richard.	February	6, 1901	"	Javenport.	Charles City.	"
6231	Patterson, A. E.	February	5, 1901	By examination	Spencer.	"	"
6230	Patterson, C. L.	February	5, 1901	"	West Side.	"	"
6225	Patterson, Harry T.	June	4, 1901	Graduate	Des Moines.	Thor.	"
6349	Proctor, Mamie.	June	4, 1901	By examination	Clearfield.	Chariton.	"
6356	Prium, N. B.	August	8, 1901	Graduate	Des Moines.	Chatsworth.	"
6872	Palmquist, A. F.	August	6, 1901	"	Des Moines.	Missouri.	"
6934	Peterie, A. L.	August	6, 1901	"	Gravely.	Missouri.	"
6938	Peterie, H. M.	August	3, 1901	By examination	Gravely.	Missouri.	"
6422	Penquite, Elmer.	September	8, 1901	"	Mingo.	Rhodes.	"
6460	Paschal, W. W.	October	1, 1901	"	Columbus City.	"	"
6466	Proulx, E. J.	October	7, 1901	Graduate	Des Moines.	"	Wisconsin.

## ABSTRACT—CONTINUED.

Number of cert.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6493	Parsons, Wm. A.	December 8, 1901	Graduate	Algona	Algona	
6490	Partridge, W. E.	January 6, 1902	By examination	Des Moines	Barnes City.	
6548	Parker, B. R.	February 4, 1902	Graduate	Oakland	Esira.	Illinois.
6564	Perry, Orla G.	March 4, 1902	Graduate	Dubuque	.....	
6569	Perry, Richard	March 4, 1902	"	Adair	.....	
6573	Phillips, W. R.	April 1, 1902	"	Independence	.....	Illinois.
6596	Pence, W. R.	April 1, 1902	"	Des Moines	Alexander.	
6628	Poppers, C. H.	April 1, 1902	By examination	Albia	Centerville.	
6651	Phillips, Chas. H.	April 22, 1902	Graduate	Des Moines	Sioux City.	South Dakota.
6656	Puckard, F. H.	April 22, 1901	"	Des Moines	.....	Illinois.
6668	Perry, Benjamin	May 5, 1902	"	Ottumwa	.....	Illinois.
6686	Perry, Frank E.	May 5, 1902	By examination	Shellsburg	.....	South Dakota.
6696	Prindle, Chas. W.	June 8, 1902	Graduate	Des Moines	.....	Illinois.
6774	Peterson, R. A.	August 6, 1902	"	Des Moines	.....	Minnesota.
6883	Pool, W. A.	August 6, 1902	"	Des Moines	Salem.	
6896	Pratt, Chas. E.	November 2, 1902	By examination	Des Moines	Waukon.	
6967	Perrinton, H. A.	December 2, 1902	Graduate	Des Moines	South Dakota.	
6997	Possakony, W. J.	March 7, 1903	By examination	Pocahontas	.....	
7002	Pitt, John	April 6, 1902	By examination	Wapello	.....	
7007	Parr, H. R.	August 2, 1903	Graduate	Oskaloosa	.....	
7068	Peck, E. J.	June 1, 1903	"	Des Moines	Indiana.	
7071	Pringle, Madge	July 1, 1903	"	Sioux City	.....	
7076	Pulford, G. W.	July 1, 1903	"	Davenport	Maryland.	
7123	Presler, J. L.	August 4, 1903	"	Des Moines	South Dakota.	
7134	Pugsley, G. W.	August 4, 1903	"	Woodbine	Illinois.	
7176	Parker, J. H.	August 4, 1903	"	Clairina	Indiana.	
7183	Pool, H. J.	October 6, 1903	"	Des Moines	.....	
7205	Pearson, Clyde	October 6, 1903	By examination	Earlham	Des Moines.	
7206	Pool, H. E.	October 6, 1903	Graduate	Sioux City	Nebraska.	
7229	Pool, H. E.	November 1, 1903	By examination	Nashua	.....	
7257	Paschke, E. R.	December 5, 1904	"	Hampton	Mason City.	
7251	Lambert, C. M.	April 6, 1904	"	Council Bluffs	Nebraska.	
7266	Parkinson, Edward	April 6, 1904	"	.....	.....	
7367	Parkinson, H. P.	April 6, 1904	"	Mason City	.....	
7448	Plummer, R. M.	June 7, 1904	"	Independence	.....	
7417	Porter, E. W.	June 7, 1904	Graduate	Sigourney	.....	
7447	Peterson, J. E.	July 1, 1904	By examination	Ellsworth	.....	
7474	Pryor, J. W.	August 2, 1904	"	Volga City	Wisconsin.	

7475	Pemberton, J. K.	August	2, 1904	By examination	Burl.	Illinois.
7476	Pride, Charles	August	2, 1904	"	Keokuk	Des Moines.
7477	Price, Arthur	August	20, 1904	Graduate	Doud, Lando	Riverside.
7478	Pollock, E. V.	August	2, 1904	By examination	Montour	Anamosa.
7479	Pouloger, Grace	August	2, 1904	Graduate	Cincinnati	Shenandoah.
7480	Power, W. C.	October	6, 1904	"	Vinton	
7481	Plumh, J. G.	December	6, 1904	"	Clarinda	
7482	Parks, J. G.	December	7, 1905	By examination	Waterloo	
7483	Peak, Warren	February	7, 1905	"	Des Moines	Illinois.
7484	Paul, H. E.	February	19, 1905	Graduate	Des Moines	
7485	Plummer, L. W.	June	19, 1905	"	Des Moines	
7486	Pringle, G. D.	June	19, 1905	"	Victor	
7487	Philips, E. M.	August	1, 1905	As owner	Lynville	Searaboro.
7488	Quire, James O.	July	5, 1880	"	Lynville	
7489	Quire, Charles E.	July	7, 1880	"	What Cheer	Hedrick.
7490	Quinn, Edward	December	19, 1881	By examination	Hawarden	
7491	Quigley, Will A.	March	8, 1882	"	Cherokee	Meriden.
7492	Quinn, Charles F.	January	20, 1883	"	Storm Lake	
7493	Quay, W. F.	October	2, 1883	"	Essex	
7494	Quist, William	October	7, 1887	"	Waucoma	South Dakota.
7495	Qualey, Martin	September	7, 1905	"	Andubon	
7496	Quimby, J. J.	February	7, 1905	As principal	Whiting	
7497	Rast, David	June	7, 1880	As owner	Clarksville	
7498	Rhoads, H. M.	June	7, 1880	"	Agency City	
7499	Reynolds, A. J.	June	2, 1880	"	Des Moines	
7500	Rogg, C. W.	June	12, 1880	"	Bellevue	
7501	Rolling, John	June	21, 1881	"	Andubon	
7502	Roberts, A. H.	June	4, 1880	"	Burlington	
7503	Richter, Adolph H.	June	8, 1880	"	Dallas Center	
7504	Richmond, J. A.	June	19, 1880	As principal	Davis City	
7505	Robinson, J. H.	June	6, 1880	As owner	Dubuque	Des Moines.
7506	Rickett, Theo. W.	June	7, 1880	"	Mitchellville	
7507	Richards, D. H.	June	7, 1880	"	Keokuk	
7508	Reeves, I. C.	June	2, 1880	As assistant	Wilcox Junction	Tipton.
7509	Ross, William P., Jr.	June	2, 1880	As owner	Washington	
7510	Rodman, A. A.	June	5, 1880	"	Waterloo	Andubon.
7511	Robertson, F. W.	June	4, 1880	As assistant	Winterset	
7512	Rippey, London	June	14, 1880	As owner	Bedford	
7513	Rhoads, H. B.	July	18, 1880	As assistant	Smithland	
7514	Rice, Charles	July	19, 1880	"	Muscataine	
7515	Reinke, G. A.	July	19, 1880	As owner	Keokuk	
7516	Riggs, William K.	July	17, 1880	"	Selma	Belmond.
7517	Root, Julius G.	August	14, 1880	By examination	Albion	
7518	Rad, Charles C.	October	18, 1880	"	Oranport	
7519	Rankin, J. B.	October	23, 1880	"	Oranport	
7520	Rappe, A. C. H. E.	August	8, 1880	"	Des Moines	Cataleosa.
7521	Robinson, H. A.	July	8, 1880	"	Des Moines	Evans.
7522	Reel, Z. T.	December	24, 1880	"	Des Moines	Des Moines.
7523	Reel, A. R.	April	24, 1881	"	Clarkeville	
7524	Ray, H. G.	December	26, 1881	"		

## ABSTRACT—CONTINUED.

Number of cer- tificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
2399	Richardson, G. A.	February 8, 1892	By examination	Blair-town	Floyd.	
2437	Riley, F. M.	February 6, 1892	"	Jefferson.	Des Moines.	
2456	Randall, Charles T.	February 24, 1892	"	Dunlap		
2480	Ryan, J. R.	March 27, 1892	"	Colfax.		
2537	Rockwell, R. B.	April 4, 1892	"	Bellevue.	Klemme.	
2533	Robbins, C. A.	September 14, 1892	"	Waukon.	Illinois.	
2542	Robinson, D. D.	October 19, 1892	"	Mt. Pleasant.	Keota.	
2592	Richardson, J. F.	March 20, 1893	"	Harper.	Malvern.	
2707	Boyce, Charles S.	March 12, 1893	"	Oakland.		
2735	Robinson, Ed. H.	April 1, 1894	"	Burlington.		
2849	Randolph, Frank.	March 8, 1895	"	Des Moines.		
2576	Rice, Oscar	March 6, 1895	"	Milton.	Corydon.	
2728	Rut, Oscar	October 1, 1895	Graduate	Dubuque	Sioux City.	
2951	Ramsey, J. N.	December 1, 1895	By examination	Kota	Cedar Rapids.	
3022	Rickett, F. W.	June 1, 1896	"	Cass.		Nebraska.
8153	Reynolds, M. M.	February 1, 1897	"	Panora.		
3224	Reed, C. W.	April 20, 1897	"	Steamboat Rock.	Woodbine.	
3227	Ryan, James B.	April 21, 1897	"	Dunlap	Winthrop.	
3242	Rainsburg, A. P.	December 17, 1897	"	Brooklyn.		
3243	Robt, H. J.	May 17, 1897	"	Leona		
3255	Roberts, F. J.	June 7, 1897	"	Clio		
3294	Riggs, J. A.	October 1, 1897	"	Park Esburg	Charter Oak.	
3327	Raymond, William P.	October 4, 1897	"	Waukon	Waterloo.	
3337	Rees, L. A.	October 13, 1897	"	Des Moines.	Nashua.	
3343	Riddle, N. D.	October 8, 1897	"	Atalissa	Hamburg.	
3522	Rudert, Otto	November 18, 1898	"	Davenport	Des Moines.	
3544	Rogers, Eugene E.	September 1, 1898	"	Des Moines		In Illinois.
3596	Ross, E. E.	October 14, 1898	"	Early.		
3579	Ross, Charles K.	January 14, 1899	"	Tipton.		
3593	Robinson, C. E.	February 7, 1899	"	Shiley	Clear Lake.	
3610	Rogers, R. R.	March 1, 1899	"	Corringtonville	Springville.	
3691	Richmond, E. C.	July 16, 1899	"	Keosauqua		
3703	Ruse, A. E.	November 12, 1899	"	Humboldt		
3800	Ryan, Milo	January 13, 1900	"	Val.		
3804	Rouse, H.	January 24, 1900	"	Mt. Pleasant.		
3833	Reed, John D.	February 23, 1900	"	Woodbine		
3870	Ream, R.	April 1, 1900	"	Iowa City	Eldora.	In Missouri.

3808	Roe, Charles P.	July	14, 1890	By examination	Grinnel	New Sharon.	In Minnesota.
3809	Roberts, William G.	December	2, 1890	"	Panora.	North Dakota.	In Wisconsin.
3810	Reinert, Caspar	February	3, 1891	"	Signourney.	Idaho.	In Nebraska.
3811	Reithorn, D. C.	February	11, 1891	"	Fayette.	Rockwell City.	
4007	Ritz, George	March	7, 1891	"	Grisswald	Idaho.	
4027	Robinson, A. J.	April	7, 1891	"	Algona	Des Moines.	
4063	Reichard, W. F.	June	26, 1891	"	Mitchellville	Washta.	
4092	Rogers, U. O.	August	4, 1891	"	Cushing	Edgewood.	
4117	Royden, F. W.	September	1, 1891	"	Greene		
4119	Reynolds, M. H.	September	1, 1891	"	Kossauqua		
4202	Ruete, Otto M.	March	28, 1891	"	Dubuque		
4225	Rogers, J. Elmer	May	5, 1892	"	Rockwell		
4288	Roberts, Thomas	May	24, 1892	"	Scranton	Laona.	
4244	Ralston, S. A.	June	7, 1892	"	Indianola	Stuart.	
4250	Readout, Albert	July	1, 1892	"	Ferguson		
4270	Reynolds, A. L.	July	9, 1892	"	Uttumwa	Woodbine.	
4293	Robbins, F.	October	26, 1892	"	Neola		
4339	Roberts, Oren B.	December	6, 1892	"	New Market	Nebraska.	
4367	Raber, A. S.	January	8, 1893	"	Stuart	Waterloo.	
4364	Kohl, Edwin L.	March	7, 1893	"	Lake Park		
4407	Reed, H. J. C.	March	7, 1893	"	Jagonsal		
4448	Russell, Charles R.	March	7, 1893	Graduate	Ottumwa	Neola.	
4445	Rolfes, Herman	May	2, 1893	"	Des Moines	Laurens.	
4467	Reed, Charles G.	July	5, 1893	By examination	Gladibrook	Cedar Rapids.	
4500	Rehkopf, A. H.	December	5, 1893	"	Des Moines		
457	Ryan, C. D.	February	6, 1894	"	Tama		
4589	Rambo, John H.	March	6, 1894	"	Greenwood		
4680	Rainsburg, C. T.	June	5, 1894	"	Brooklyn		In Illinois.
4705	Rowland, A. A.	August	6, 1894	"	Linton	Belmond.	
4723	Robinson, R. B.	September	4, 1894	"	Sumner	Kokuk.	
4731	Rawhouser, J. L.	September	4, 1894	"	Tipton	Morning Sun.	
4736	Robertson, Samuel	September	12, 1891	"	Columbia Junction		
4738	Reynolds, John W.	September	12, 1891	"	Weston		
4773	Soos, N. K.	November	14, 1894	"	Vieno	Rockwell City.	
4800	Stasell, Fred	January	12, 1895	"	Lake City	Kingsley.	
4802	Stoney, E. H.	January	22, 1895	"	Pierston	Somers.	
4804	Stoney, E. H.	January	22, 1895	"	Leimville		
4807	Roberts, Joseph	May	7, 1895	"	Linn Grove	Britt.	
4817	Roe, Carl O. H.	August	9, 1895	"	Pankos City		
4928	Redman, I. D.	September	10, 1895	"	Pratt City	Henderson.	
4977	Redman, Henry	September	10, 1895	"	Hamden	Keota.	
5021	Reuther, C. H.	March	8, 1896	"	South English	Glenwood.	
5043	Rouso, Arthur L.	April	7, 1896	"	Mc Pleasant		
5069	Rodman, Albert	April	7, 1896	"	Des Moines		
52	Rodman, George, Jr.	February	2, 1897	"	Waterloo		In Missouri.
52 9	Roberts, F. H.	March	2, 1897	"	Dubuque		
5220	Roberts, W. H.	March	2, 1897	"	Keosauqua	Bloomfield.	
5228	Reagard, Fred	March	2, 1897	"	Clear Lake	Stratford.	
52 38	Reagard, Fred	April	5, 1895	"	Elkader	Chicago.	
5231	Rebnok, E. E.	April	5, 1897	"	Waterloo		

## ABSTRACT—CONTINUED.

Number of certificate	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5360	Royer, J. D.	May 5, 1897	By examination	Hampton	Coon Rapids.	North Dakota.
5371	Romaine, Ernest	May 4, 1897	"	Grinnell	Popejoy.	
5372	Richards, W. W.	May 4, 1897	"	Cedar Rapids.	.....	
5381	Rhea, W. F.	August 2, 1897	Graduate	Odebolt	.....	
5387	Roth, O. P.	November 2, 1897	By examination	Dyersville.	North English.	North Dakota.
5394	Rust, E. G.	December 7, 1897	"	Pimburgh.	.....	
5399	Remington, O. E.	March 1, 1898	"	Bedford	.....	
5434	Remington, O. E.	April 1, 1898	"	Forest City.	.....	
5442	Rogers, A. M.	April 5, 1898	"	Dana	Paton.	North Dakota.
5444	Reed, N. F.	April 5, 1898	"	Eldon	Ottumwa.	
5465	Rodgers, J. G.	April 5, 1898	"	Montezuma.	.....	
5476	Ross, J. A.	April 5, 1898	"	Marathon.	Jolly.	
5479	Robinson, C. W.	April 5, 1898	"	Wavis City.	.....	North Dakota.
5490	Roche, W. H.	April 5, 1898	"	Riceville.	.....	
5508	Reed, C. T.	June 2, 1898	"	Portsmouth.	Steamboat Rock.	
5538	Ruegnitz, B. A.	August 2, 1898	"	Dubuque.	.....	
5590	Ramsay, A. J.	October 4, 1898	Graduate	Marble Rock.	Randalla.	North Dakota.
5641	Rogers, R. E.	March 7, 1899	By examination	Wesley.	O-sege.	
5793	Reynolds, Albert E.	September 5, 1899	Graduate	Ottumwa.	Emmetsburg.	
5823	Ryan, Thos. C.	September 5, 1899	"	Marcus.	Daugherty.	
5836	Reimers, William F.	November 9, 1899	"	Bancroft.	Whitemore.	In Colorado.
5839	Rodemeyer, F. H.	November 9, 1899	"	Hampton.	Rhodes.	
5894	Roof, Don	January 2, 1900	By examination	Fremont	.....	
5904	Raessler, R.	January 2, 1900	"	Anthon.	.....	
5980	Rettenmaler, Frank J.	February 6, 1900	Graduate	Carroll.	Illinois.	In Illinois.
5980	Rolfs, Herman O.	March 6, 1900	"	Davenport.	Victor.	
6029	Ralya, Leland O. G.	June 5, 1900	"	Sioux City.	Des Moines.	
6084	Rastler, Francis C.	June 5, 1900	"	Grinnell.	Dubuque.	
6093	Rust, E. E.	June 5, 1900	By examination	Estherville.	.....	In Illinois.
6078	Richman, Fred H.	June 5, 1900	By examination	Allerton.	.....	
6190	Rankin, Roy E.	December 4, 1900	By examination	Des Moines.	.....	
6191	Ryan, James H.	December 4, 1900	By examination	Dubuque.	.....	
6216	Reimer, Herman	February 5, 1901	Graduate	Carroll.	Conway.	In Illinois.
6290	Reitenmaler, Joseph F.	February 5, 1901	"	Bradyville.	.....	
6369	Ryerson, Earl	April 2, 1901	By examination	Lewis.	.....	
6369	Richardson, Guy L.	April 2, 1901	"	Des Moines.	Charles City.	
6402	Ritten, Louis N.	July 7, 1901	"	.....	.....	

6313	Reel, Geo. W.	September	3, 1901	Graduate	Oskaloosa	Albia,	In Illinois.
6383	Roberts, E. W.	August	6, 1901	By examination	Sidney	South Dakota.	
6425	Roberts, Ralph P.	September	3, 1901	Graduate	Andon		
6435	Roushar, J. C.	October	1, 1901	By examination	Clinton	Belle Plaine,	
6461	Reppert, Gus	October	1, 1901	Graduate	Meservey	Lake City.	
6498	Rellihan, J. P.	December	3, 1901	Graduate	Hampton	Latimer.	
6535	Rice, Louis J.	January	7, 1902	By examination	Ma-shalltown.	Dysart.	
6539	Reed, Carl B.	January	7, 1902	"	Colfax		
6553	Ragatz, F. J.	February	4, 1902	"	Dubuque		
6645	Rowland, W. J.	April	22, 1902	Graduate	Waterloo	Fayette,	
6645	Ricker, W. M.	April	1, 1902	By examination	Des Moines	South Dakota.	
6714	Rider, Geo. H.	June	20, 1902	Graduate	Bellevue		
6717	Roche, Jos. L.	June	20, 1902	Graduate	Cascade		
6741	Rhoden, R. H.	July	8, 1902	By examination	Modale		
6775	Rolling, John Jr.	August	5, 1902	Graduate	Bellevue		
6808	Richards, W. A.	August	5, 1902	By examination	Bristol	Harvey.	
6872	Richards, Chas. E.	October	7, 1902	Graduate	Des Moines		
6891	Rice, J. H.	December	2, 1902	By examination	Des Moines	Etherville.	
6897	Roth, Henry	December	3, 1902	Graduate	Dyersville.	Sigourney.	
6924	Rupp, Harlan E.	February	3, 1903	Graduate	Dumont		
6935	Runkel, Julia	February	3, 1903	"	Des Moines		
6936	Rice, Thomas E.	February	3, 1903	"	D-s Moines	orwalk	
6937	Rice, E. M.	February	3, 1903	"	Menlo	Greenfield.	
6953	Rice, C. A.	February	3, 1903	By examination	Des Moines		
6957	Roche, J. W.	February	3, 1903	Graduate	Riceville		
7005	Reinke, C. A.	July	1, 1903	"	Muscatine		
7072	Rastede, D. B.	July	1, 1903	"	Clinton	Illinois.	
7133	Roberts, J. G.	August	4, 1903	"	Plainfield	Clinton.	
7131	Roth, O. R.	August	4, 1903	"	Des Moines	Illinois.	
7177	Rider, J. Y.	October	6, 1903	"	Des Moines	Indiana.	
7194	Russell, L. N.	October	6, 1903	"	Des Moines	Wisconsin.	
7207	Redmon, J. F.	October	6, 1903	By examination	Red Oak		
7280	Rehder, E. A.	November	2, 1903	Graduate	Gladbrook		
7285	Reynolds, E. O.	December	1, 1903	By examination	Oedar Rapids		
7285	Ruegnitz, L. H.	December	1, 1903	By examination	Stratford	Webster City.	
7277	Redcliff, H. G.	February	2, 1904	Graduate	Fort Dodge		
7278	Ridgely, E. A.	February	2, 1904	By examination	Des Moines	Illinois.	
7315	Rosen, M. W.	February	2, 1904	By examination	Warshaltown		
7314	Rogers, A. E.	February	2, 1904	Graduate	Swan		
7330	Rose, A. E.	April	5, 1904	"	Des Moines		
7331	Ruggies, L. R.	April	5, 1904	By examination	Winfield	Missouri Valley.	
7333	Roberts, J. H.	April	5, 1904	"	Sanborn		
7404	Rinabarger, S. H.	June	7, 1904	Graduate	Milton		
7407	Rose, E. B.	July	1, 1904	By examination	Vinton		
7473	Robinson, F. E.	August	2, 1904	Graduate	Des Moines	Indiana.	
7498	Richardson, C. A.	August	2, 1904	"	Des Moines	Gladbrook.	
7511	Ragan, R. T.	October	2, 1904	Graduate	Brill		
7544	Ross, J. B.	December	4, 1904	"	Des Moines		
7546	Round, G. S.	December	6, 1904	"	Indianola		
				"	Oakland	McClellan.	

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
7555	Rathgen, H. G.	December 6, 1904	By examination ..	Iida Grove.....	Battle Creek.	
7572	Roberts, F. M.	February 7, 1905	Graduate .....	Columbia Junction.	Missouri.	
7605	Robertson, H. A.	April 22, 1905	By examination ..	Waukegan.		
7621	Reinhardt, A. J.	April 22, 1905	Graduate .....	Watertown.		
7637	Rugg, Roger.	June 6, 1905	By examination ..	Oakland.	Laurens.	
7645	Russell, J. E.	June 6, 1905	By examination ..	Emmeburg .....		
7666	Roche, C. D.	June 18, 1905	Graduate .....	Rockwell City.	Silver City.	
7710	Roby, Fred.	July 12, 1905	" .....	Des Moines.		
7720	Raines, R. V.	August 1, 1905	" .....	Des Moines.		
7721	Reals, F. A.	August 1, 1905	" .....	Bedford.		
7731	Raber, Doice.	August 1, 1905	" .....	Des Moines.		
7759	Rice, A. H.	August 9, 1905	By examination ..	Des Moines.	Boone.	
7782	Sherman, J. M.	June 9, 1905	As owner.	Abon.		
187	Shattorth, J. W.	June 11, 1905	" .....	McCleasant.		
190	Shannon, M. M.	June 11, 1905	" .....	Whitson.		
219	Shanks, F. B.	June 16, 1905	" .....	West Mitchell.	Red Oak.	
273	Sheth, W. H.	June 8, 1905	" .....	Shell Rock.		
275	Shinner, William B.	June 10, 1905	As assistant.	Anamosa.		
277	Shinner, Mary A.	June 10, 1905	" .....	Clanice.		
285	Smith, George E.	June 2, 1905	As owner.	Clanice.	West Union.	
300	Stiles, Arthur E.	June 18, 1905	" .....	Clanice.		
393	Schleser, Gustave	June 18, 1905	" .....	Davenport.		
447	Stanley, J. G.	June 8, 1905	" .....	Dexter.		
455	Statterlee, Dwight	June 9, 1905	" .....	Dunlap.		
466	Statterlee, E. S.	June 9, 1905	" .....	Dunlap.		
475	Stydler, O. H.	June 8, 1905	As assistant.	Malvern.	Tabor.	
501	Snyder, James T.	June 8, 1905	As owner.	Norway.		
518	Spranger, William S.	June 10, 1905	" .....	Corydon.		
520	Stearns, R. M.	June 21, 1905	" .....	Emer-on.		
551	Stmale, George.	June 8, 1905	" .....	Independence.		
660	Storking, Joseph O.	June 8, 1905	As assistant.	Kearnsauqua.		
731	Strader, W. E.	June 28, 1905	As owner.	Iowa City.		
754	Stephenson, A. O.	June 16, 1905	" .....	East Des Moines.		
786	Stempel, A. H.	July 1, 1905	As assistant.	Fort Madison.		
804	Snyder, Daniel B.	June 5, 1905	As owner.	Lyons.		
832	Stidley, George P.	June 5, 1905	" .....	Missouri Valley		
899	Summers, L. F.	June 7, 1905	" .....	Milton.		

919	Smith, Henry C.	June	22, 1880	As assistant.	Manchester.	
978	Smith, John R.	July	6, 1880	As owner.	Kellogg.	
1038	Steadt, Godfrey.	June	9, 1880	"	Postville.	
1084	Sprague, J. F.	June	8, 1880	"	Russell.	
1110	Staker, J. A.	June	28, 1880	"	Burlington.	
1128	Stearns, D. Q.	July	5, 1880	"	Chariton.	
1198	Schroeder, Frederick.	June	17, 1880	As assistant.	Des Moines.	
1147	Southam, John A.	July	10, 1880	"	Des Moines.	
1204	Spott, Calvin B.	June	30, 1880	As owner.	Fontanelle.	
1282	Steger, Stephen.	June	18, 1880	"	Toledo.	
1348	Stevens, Henry.	June	17, 1880	"	Tama City.	
1478	Swess, Elmer L.	July	16, 1880	"	Ma. Bna.	Des Moines.
1548	Shannon, Theodore.	July	17, 1880	As assistant.	Fort Madison.	
1635	Stroger, J. M.	August	16, 1880	As owner.	Leocaster.	
1682	Stuart, James D.	August	30, 1880	By examination.	Monamin.	Magnolia.
1685	Stuart, Webb.	August	2, 1880	By examination.	Des Moines.	
1712	Schumaker, D. R.	August	30, 1880	As owner.	Des Moines.	
1720	Scott, E. M. B.	August	30, 1880	"	Ottumwa.	
1797	Schmidt, Conrad.	August	5, 1880	By examination.	Anama.	Des Moines.
1883	Sparks, G. W.	July	30, 1880	"	Vinton.	Cumberland.
1883	Sparr, George F.	November	9, 1880	"	Griswold.	
1940	Schaefer, George H.	December	15, 1880	"	Fort Madison.	
2015	Shaffer, Lewis O.	March	2, 1881	"	Altoona.	
2044	Sherrill, Louis B.	March	17, 1881	"	Hamburg.	Hastings.
2070	Swariz, John L.	January	10, 1881	"	Iowa Falls.	
2088	Sager, G. A.	April	6, 1881	"	Promise City.	
2127	Schriever, Wm.	May	17, 1881	"	Sigourney.	Des Moines.
2123	Spaulding, S. J.	May	23, 1881	"	Milo.	Oiebolt.
2140	Selby, J. Milton.	June	24, 1881	"	Carlton.	Smithland.
2142	Stell, L. S.	May	24, 1881	"	Arcadia.	Deulson.
2144	Schlumberger, P.	May	27, 1881	"	Griswold.	
2198	Sampson, J. W.	August	12, 1881	"	Fairfield.	In Colorado.
2283	Schanek, G. W.	September	6, 1881	"	Burlington.	
2266	Schoel, August.	December	3, 1881	"	Gladbrook.	Clinton.
2302	Svennings, E. J.	December	3, 1881	"	Fort Dodge.	Waterloo.
2381	Sackett, R. W.	March	31, 1881	"	Sion Rapids.	Manning.
2356	Smith, Charles E.	March	28, 1882	"	Clarinda.	Fort Dodge.
2419	Stillians, W. A.	April	1, 1882	"	Lucas.	Villisca.
2419	Stover, Noah W.	April	27, 1882	"	Anamosa.	
2484	Sigworth, M. P.	May	17, 1882	"	Elgin.	
2467	Stoehr, Gus A.	May	24, 1882	"	Scranton.	Stuart.
2504	Smith, A. W.	July	24, 1882	"	Parkersburg.	Eagle Grove.
2500	Smalpage, E. M.	March	20, 1883	"	Brooklyn.	
2501	Shradler, F. P.	March	3, 1883	"	Marshalltown.	
2618	Steg, Henry C.	April	8, 1883	"	Hedrick.	Kokuk.
2617	Steg, Henry C.	April	17, 1883	"	Monroe.	
2618	Steg, Henry C.	June	5, 1883	"	Durant.	Walcott.
2618	Steg, Henry C.	June	5, 1883	"	Lucas.	Parnell.
2687	Shrader, J. A.	September	12, 1883	"	Lucas.	Minn.
2888	Schumacher, H.	October	2, 1883	"		
2894	Shnell, T. J.	November	6, 1883	"		
2713	Stover, Emery E.	January	16, 1884	"		

## ABSTRACT—CONTINUED.

Number of certificates	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
2748	Stewart, William J.	May 14, 1884	By examination	Grimes.		
2750	Stemets, John.	May 20, 1884	"	Emmetsburg.		
2753	Simcoke, J. L.	May 23, 1884	"	Redfield.	Adel.	
2771	Sifford, Charles.	May 28, 1884	"	Wall Lake.	South Dakota.	
2811	Simons, A. C.	November 18, 1884	"	Ida Grove.		
2844	Schmidt, Louis.	March 10, 1885	"	Des Moines.		
2882	Skelton, Alvin H.	May 20, 1885	"	Pulaski.	Bloomfield.	
2888	Stanton, John H.	May 27, 1885	"	Chariton.	(Deep River only.)	
2894	Sanders, J. C.	June 18, 1885	"	Deep River.		
2897	Schlegel, Carl E.	July 22, 1885	Graduate	Davenport.		
2898	Soddard, F. S.	July 7, 1885	By examination	J. sup.		
2907	Saunders, C. J.	July 31, 1885	"	Clare.		
2921	Sampson, S. V.	September 8, 1885	"	Ottumwa.	Agency City.	
2950	Stream, Curtis.	February 18, 1886	"	Des Moines.	Oreston	
2977	Sampson, F. E.	February 2, 1886	"	Greenfield.		
2988	Shrader, Charles O.	March 4, 1886	"	Iowa City.	Independence.	
2998	Sherman, Emory.	March 16, 1886	"	Alden.	Centerville.	
3002	Smith, David F.	May 4, 1886	"	Wellman.		
3014	Somers, John W.	June 15, 1886	"	Ida Grove.		
3042	Scherling, Gnat.	August 18, 1886	Graduate	Sioux City.		
3044	Sampson, F. W.	August 30, 1886	"	Osage.		
3058	Stevens, W. E.	July 27, 1886	By examination	Siiley.		
3108	Stewart, J. H.	December 7, 1886	"	Washington.		
3123	Sely, S. O.	February 6, 1887	"	Macdonia.	Odebolt.	
3125	Stemple, G. L.	March 1, 1887	"	Hudson.		
3167	Stueber, J. M.	February 9, 1887	"	Massena.		
3183	Stuckson, William.	March 9, 1887	"	Stiddon.		
3185	Slater, Willis O.	March 9, 1887	"	Mango.		
3175	Scott, James O.	March 28, 1887	"	Oedar Rapids.		
3205	Seyera, W. George L.	April 8, 1887	"	Garwin.		
3217	Springer, William.	April 8, 1887	"	Carroll.		
3245	Sturgess, William.	May 17, 1887	"	LaBaque.		
3248	Schmitt, F. C. H.	May 31, 1887	"	Sioux City.	Marion.	
3252	Schmitt, W. C.	May 31, 1887	"	Sioux City.	Valley Junction.	
3271	Shen, Albert J.	July 18, 1887	"	Keosauqua.	Quincy.	
3288	Smith, Henry.	August 16, 1887	"	New Sharon.		
3304	Bedwick, W. L.	August 31, 1887	Graduate	Sioux City.		In Minnesota.

3315	Smith, Fred J.	September	8, 1887	By examination.	Alton.	Pocahontas.	In Washington.
3320	Starr, John W.	September	26, 1887	"	Fairfield.	Washington.	
3333	Stewart, Charles W.	December	6, 1887	"	Crawfordsville.	Ohio.	
3368	Smith, Albert E.	January	25, 1888	"	Ocheysdan.	Des Moines.	
3370	Sturges, N. F.	January	30, 1888	"	Carroll.		
3382	Stewart, David T.	February	21, 1888	"	Hartley.		
3397	Stevens, John L.	February	2, 1888	"	Iowa City.		
3433	Stoll, W. W.	April	3, 1888	"	Arcadia.	Fontanelle.	
3436	Sanford, H. Clay	April	10, 1888	"	Belle Plaine.	Chicago, Ill.	
3442	Schultz, Louis C.	April	17, 1888	"	McGregor.	Boone.	
3463	Saudell, C. A.	May	23, 1888	"	Morgana.		In N. Dakota.
3533	Saterlee, Gale	September	6, 1888	"	Boone.	Waterloo.	
3534	Sargeant, Bernard.	September	18, 1888	"	Waterloo.		
3540	Sargent, W. L.	October	4, 1888	"	Ottumwa.	Fontanelle.	
3553	Swelson, Lulu	November	6, 1888	"	Massena.	Council Bluffs.	
3554	Sellers, Frank E.	November	14, 1888	"	Walnut.		
3568	Surgeon, Q. A.	December	4, 1888	"	Madrid.	Havlock.	
3577	Sheldon, J. B.	January	17, 1889	"	Beaman.	Eagle Grove.	
3601	Smith, Albert C.	February	19, 1889	"	Marshalltown.	Winterset.	
3607	Smith, M. E.	May	23, 1889	"	Des Moines.		
3652	Selling, Ed H.	June	18, 1889	"	Boone.		
3744	Stewart, Mrs. E. A.	October	1, 1889	"	Grimes.		
3755	Shank, Harry W.	October	15, 1889	"	Red Oak.		
3766	Smallpage, J. B.	November	9, 1889	"	Eagle Grove.		
3766	Schmidt, H. E.	November	19, 1889	Graduate.	Keokuk.	Mason City.	
3783	Spahr, A. G.	January	7, 1890	By examination.	Toledo.		
3808	Scunyster, H. J.	January	23, 1890	"	Cherokee.		Utah.
3815	Schneider, Otto C.	February	8, 1890	"	Iowa City.	Marshalltown.	
3835	Seeley, Charles A.	February	27, 1890	"	Vinton.	Storm Lake.	
3869	Skiff, William C.	April	1, 1890	"	Ochester Center.	Griswold.	
3891	Schlichting, E. A.	May	8, 1890	"	Minden.		
3938	Studley, William J.	June	9, 1890	"	Dallas Center.	Oasey.	Washington.
3910	Shaffer, O. W.	July	16, 1890	"	Adel.		
3927	Smith, Olof H.	September	2, 1890	"	Odebolt.		
3929	Staford, R. H.	September	2, 1890	"	Sumner.		
3933	Smith, M. R.	September	5, 1890	"	Con-aville.	Laurel.	
3960	Steen, Michael J.	September	2, 1890	"	Anthony.	Cherokee.	
3977	Shaffer, W. B.	December	5, 1890	"	Albion.	Des Moines.	
3989	Stimmers, George	December	12, 1890	"	Ames.		Oregon.
4023	Stoops, Charles C.	January	14, 1891	"	Des Moines.	Nebraska.	
4028	Smith, William C.	February	1, 1891	"	Battle Creek.	North Dakota.	
4033	Stone, N. H.	March	7, 1891	"	Marathon.		
4043	Stannway, Harry	April	7, 1891	"	Leon.	Des Moines.	
4075	Stroud, J. B. G.	May	5, 1891	"	Taber.	Idaho.	
4078	Sturman, David U.	June	6, 1891	"	Des Moines.	Nebraska.	
4079	Sturman, David U.	June	18, 1891	"	Castana.		South Dakota.
4102	Shaw, William S.	August	18, 1891	"	Centerville.		
4104	Scott, Walter E.	August	21, 1891	"	Adel.		
4109	Smith, J. E.	August	25, 1891	Graduate.	Adel.		
4127	Strunk, H. J.	October	10, 1891	By examination.	Earling.	Earlham.	
						Templeton.	

## ABSTRACT—CONTINUED.

Number of cert. thdate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
4141	Sartori, Anton.	November 13, 1891	By examination	Le Mars.		
4153	Samuelson, J. A.	December 1, 1891	"	Sioux City.		
4161	Shakapcar, Geo	January 6, 1891	"	Center City.		
4162	Stone, Charles F. M.	January 6, 1891	"	Marshalltown.	Tama.	
4166	Shafer, R. R.	February 28, 1892	"	Ft. Madison.		
4172	Sherman, D. D.	February 2, 1892	"	Washington.		
4173	Sigworth, D. B.	February 2, 1892	"	Anamosa.		
4178	Sherman, M. E.	February 18, 1892	"	Rockwell City.	Des Moines	
4218	Sigworth, M. P.	April 18, 1892	"	Oakland.		
4233	Smith, J. C.	May 14, 1892	"	Woolstock.		
4237	Salmon, G. A.	May 14, 1892	"	Columbus Junction.		
4247	Sedler, William	June 21, 1892	"	Minburn.		
4250	Singer, William A.	June 21, 1892	Graduate	Peoria, Ill.	St. Charles, Mo.	
4252	Shin, Amos F.	July 6, 1892	By examination	Corning.		
4263	Smith, R. H.	July 6, 1892	"	Des Moines.		
4267	Sands, F. G.	July 6, 1892	By examination	Alnsworth.		
4280	Sullivan, E. F.	August 9, 1892	Graduate	Des Moines.	Afton.	
4283	Soetje, O. H.	August 19, 1892	"	Monticello.		
4301	Springeour, A.	September 18, 1892	By examination	Belle Plaine.	Montour.	
4304	Swenson, J. H. L.	September 18, 1892	"	Mason City.	Batavia.	
4308	Shambaugh, L. D.	September 20, 1892	"	Elkport.		
4315	S-yfert, H. J.	October 4, 1892	Graduate	Arcadia.	Valley Junction.	
4331	Stephenson, C. C.	October 30, 1892	By examination	Caterville.		
4343	Samson, C. H.	November 6, 1892	Graduate	Dubuque.		
4357	Shaffer, J. F.	December 14, 1893	By examination	Casey.		
4367	Shannon, E. S.	January 16, 1893	"	Barad.	Dawson.	
4368	Swift, Theo. T.	January 16, 1893	Graduate	Decorah.	Traer.	
4406	Simons, A. B.	March 19, 1893	By examination	Marshalltown.	State Center.	
4411	Swenson, S. N.	March 8, 1893	"	Sidney	Hamburg.	
4420	Shonier, C. E.	March 8, 1893	"	Fonda	Superior.	
4426	Snyder, E. B.	March 4, 1893	"	Shellsburg	Cedar Rapids.	
4437	Smart, F. C.	April 11, 1893	"	Keosauqua	New London.	
4457	Swan, A. B.	May 2, 1893	"	Hancock.		
4460	Schwartz, William	May 30, 1893	"	Walker.		
4476	Schnitz, Otto W.	June 13, 1893	Graduate	Jolley.		In Illinois.
				Williams.		

4514	Shurtner, Frank S.	September	5, 1893	By examination	Fairfield.		
4518	Shuey, James F.	September	5, 1893	"	Jefferson.	Council Bluffs.	
4527	Schroeder, Frank	September	5, 1893	"	Atlantic	Oacola.	
4530	Selle, Frank W.	October	8, 1893	"	Murray		
4536	Stillecom, W. M.	October	31, 1893	"	Kingswood.		
4541	Smale, Herbert T.	November	7, 1893	"	Kingsley	Sec City.	
4543	Schriener, Charles A.	December	5, 1893	"	Moravia	St. Joseph.	
4554	Sandberg, Lewis A.	December	5, 1893	"	Stanton	Oile.	
4560	Swallow, George	December	19, 1893	"	D. & Moines.	Knowlton.	
4577	Swallow, R. R.	February	6, 1894	"	Hibbard.	Trar.	
4581	Sloan, William O.	February	6, 1894	"	Waterloo	Alton.	
4623	Schant, A.	April	5, 1894	"	Lemars		In Idaho.
4632	Steva, H. G.	April	17, 1894	"	Burlington.		
4645	Sutler, Joseph R.	June	12, 1893	"	Burlington.	Burlington.	
4658	Stockwell, C. W.	June	6, 1894	"	Decorah		
4672	Spotts, S. Walter	June	5, 1894	"	Lemars		
4673	Schools, J. J.	June	5, 1894	"	Decorah		
4679	Steele, Frank R.	June	5, 1894	"	Decorah		
4688	Smith, W. C.	July	3, 1894	"	Decorah		
4697	Schultz, W. B.	July	29, 1894	"	Decorah		
4717	Smith, Edgar F.	September	4, 1894	"	Decorah		
4718	Sorenson, F. R.	September	4, 1894	"	Decorah		
4737	Smith, W. A.	September	12, 1894	"	Decorah		
4741	Snider, W. O.	September	12, 1894	"	Decorah		
4755	Stephenson, George E.	March	8, 1893	"	Decorah		
4757	Shuggart, N. K.	August	24, 1894	"	Decorah		
4764	Smith, Frank N.	December	8, 1894	"	Decorah		
4782	Salmon, H. M.	December	29, 1894	"	Decorah		
4783	Stadford, George A.	January	21, 1895	Graduate	St. Louis	Burlington.	In Illinois.
4803	Soper, George M.	January	13, 1895	By examination	St. Louis	Latimer.	
4805	Stanley, William F.	February	1, 1895	"	St. Louis	Waverly.	
4820	Shores, George A.	February	5, 1895	"	Waterloo	Tripoli.	
4822	Snyder, J. M.	February	5, 1895	"	Muscatine	Sweetland.	
4827	Sherrard, Joe	March	5, 1895	"	St. Louis	Washington.	
4827	Spaulding, William	March	5, 1895	"	Council Bluffs.		
4833	Stanley, William O.	March	7, 1895	"	Dexter	Leon.	
4838	Stempel, John M.	March	7, 1895	"	Fort Madison.		
4874	Shattilworth, Hubert W.	March	7, 1895	"	Cedar Rapids.	Greco.	
4880	Spencer, Harry D.	March	7, 1895	"	Des Moines	Oakland.	
4883	Scarlight, Frank	March	7, 1895	"	Roie	Moville.	
4908	Smith, Roy B.	August	15, 1895	Graduate	Odebolt	St. Louis Rapids.	In Illinois.
4911	Savin, A. L.	August	6, 1895	By examination	Eagle Grove	St. Louis Rapids.	
4914	Smith, Edw. E.	August	6, 1895	"	St. Louis Rapids.		
4919	Strass, Carl	August	6, 1895	"	St. Louis	Waverly.	
4925	Schwartz, W. A.	August	6, 1895	"	Waverly		
4940	Stedner, A. J.	November	12, 1895	"	Des Moines		
4949	Sanderson, C. R.	December	8, 1895	"	Montrose	Minnesota.	In Minnesota.
4957	Sawyer, Eva	December	8, 1895	"	Calamus		
4963	Sanders, C. W.	December	17, 1895	"	Manley		

## ABSTRACT—CONTINUED.

Number of cer- tificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
4971	Smith, W. H.	January 7, 1896	By examination	Greenfield	.....	In Kansas.
4972	Spahr, T. E.	January 7, 1896	"	Mason City	Perry.	
4986	Speeding, Floyd	February 4, 1896	"	Britt	Mitchell.	
4987	Smith, H. M.	February 4, 1896	"	Churdan	Giddens.	
5000	Sorenson, Hans	February 7, 1896	"	Marshalltown	Eagle Grove.	In Minnesota.
5001	Shipman, E. D.	February 7, 1896	"	Wapello	.....	
5011	Smith, L. F.	March 8, 1896	"	Gladbrook	.....	
5018	Snake, J. F.	March 11, 1896	Graduate	Prairie City	Ames.	
5023	Steely, J. W.	March 17, 1896	By examination	Waterloo	Eldora.	
5081	Smuts, W. A.	April 7, 1896	"	Hillsboro	.....	
5046	Swalmun, H. U.	April 7, 1896	"	Hubbard	Belle Plaine.	
5055	Swaffner, W. W.	April 21, 1896	"	Sanborn	Harper.	
5075	Steely, J. H.	May 5, 1896	"	Waterloo	Eldora.	
5076	Sloan, J. A.	May 5, 1896	"	Eldora	Leando.	
5077	Simpson, G. A.	May 5, 1896	"	Decorah	Swea City	In Colorado.
5078	Sornsen, A. I.	May 5, 1896	"	Nevada	Cresco.	
5102	Shuttleworth, E. H.	July 7, 1896	"	Stuart	.....	In California.
5105	Story, C. F.	July 7, 1896	"	Eldora	Red Oak.	
5125	Starr, G. A.	August 4, 1896	"	Cumberland	Perry.	
5138	Starr, H. A.	September 1, 1896	"	Garner	.....	
5145	Snow, Matilda B.	September 1, 1896	"	Cherokee	.....	
5166	Schnater, G. W.	September 1, 1896	"	Cherokee	.....	
5180	Southwick, M. E.	October 10, 1896	"	Modale	.....	
5181	Sarset, W. F.	November 2, 1896	"	Forest City	Hasper.	
5184	Sheldon, P. B.	April 2, 1897	"	Massena	.....	
5197	Shadle, F. B.	February 2, 1897	"	Pleasantville	Eatherville.	
5199	Smith, G. J.	February 2, 1897	"	Kiceville	.....	
5205	Shields, W. M.	February 2, 1897	"	Sheldon	.....	
5222	Shipley, Henry	March 2, 1897	"	Afton	.....	
5244	Shroud, P. E.	March 2, 1897	"	Sheldon	.....	
5245	Smith, A. M.	April 6, 1897	"	Des Moines	.....	
5254	Specht, A. R.	April 6, 1897	"	Waukon	.....	
5259	Seaton, S. H.	April 6, 1897	"	McGregor	Algon.	In Illinois.
5261	Schulte, J. F.	May 4, 1897	"	Maloy	Delphos.	
5263	Schultz, George	May 4, 1897	"	Victor	.....	
5278	Shockley, Ned	June 1, 1897	"	Cumberland	Farragut.	

5395	Schen, L. O.	July	6, 1897	By examination	Stacyville	Weeley.	In South Dakota
5397	Spain, R. T.	September	7, 1897	Graduate	Des Moines.	Enterprise.	
5398	Spears, J. C.	October	5, 1897	By examination	Vinton.	Des Moines.	
5399	Struble, A. J.	November	2, 1897	"	Akron.		
5400	Schultz, C. S.	November	9, 1898	"	Lake Park.		
5401	Shelberger, E. P.	November	9, 1898	"	Columbus Junction.		
5402	Shelley, P. B.	February	1, 1898	"	Lost Nation.		
5420	Storey, G. F.	March	1, 1898	"	Manchester.		
5421	Shiley, G. F.	March	1, 1898	"	Missouri Valley.		
5445	Shaw, F. W.	March	1, 1898	"	Monroe.		
5446	Sylvester, V. W.	April	5, 1898	By examination	Battle Creek.		
5447	Stiles, W. H.	April	5, 1898	"	Garden Grove.		In Nebraska.
5450	Scott, R. W.	April	5, 1898	"	Lamoni.		
5451	Sigworth, M. P., Jr.	April	5, 1898	"	Anamosa.		
5452	Schroeder, R. E.	April	5, 1898	"	Garnavillo.		
5453	Storch, H. O.	April	5, 1898	"	Sheffield.		
5454	Smith, H. P.	June	7, 1898	"	Lime Springs.		In Illinois.
5455	Shields, J. S.	June	7, 1898	"	Decatur City.		
5456	Strickel, J. P.	July	5, 1898	Graduate	Waterloo.		
5457	Scott, E. N.	July	27, 1898	Graduate	Osoola.		In Illinois.
5458	Schiller, Edgar	July	7, 1898	By examination	Ames.		In Nebraska.
5459	Spurling, E. E.	August	3, 1898	Graduate	Grand Junction.	Maxwell.	
5460	Shumaker, J. L.	August	3, 1898	"	Des Moines.		
5461	Baby, J. L.	August	3, 1898	"	Forest City.		
5462	Sperling, Frank.	August	3, 1898	"	Corning.		
5463	Sheppard, S. H.	August	3, 1898	"	Mt. Pleasant.		
5464	Smith, D. L.	August	6, 1898	By examination	Madrid.	Dekena.	
5465	Stevens, Archie.	September	6, 1898	Graduate	Des Moines.	Tripp.	In Colorado.
5466	Smith, F. C.	October	1, 1898	"	Bancroft.	Osga.	In Wisconsin.
5467	Snyder, C. J.	November	6, 1898	"	Aurelia.		In Illinois.
5468	Stoates, E. R.	December	6, 1898	By examination	Traer.	Armstrong.	
5469	Smith, G. F.	December	6, 1898	"	Eldora.		
5470	Stevens, Lois M.	December	6, 1898	"	Mayard.	Manilla.	
5471	Stahl, S. E.	December	6, 1898	"	Montour.	Burt.	
5472	Shipman, C. V.	January	8, 1899	"	Bancroft.	Colfax.	
5473	Stoehr, G. L.	January	8, 1899	Graduate	Columbus Junction.		
5474	Selleck, E. C.	March	7, 1899	By examination	Egin.		
5475	Shipley, E. P.	March	7, 1899	Graduate	Onawa.		
5476	Smith, Channing	March	7, 1899	"	Corydon.		
5477	Stoite, F. L.	March	7, 1899	"	Des Moines.	Granger.	In Illinois.
5478	Shamloer, Bernice M.	April	4, 1899	"	Newton.	Fremont.	In Missouri.
5479	Stamenstad, M. O.	April	4, 1899	By examination	Iowa City.		In N. Dakota.
5480	Swan, W. C.	April	29, 1899	Graduate	Morning Sun.		
5481	Speeding, E. W.	April	6, 1899	"	Marble Rock.	Beacon.	
5482	Severin, J. C.	May	9, 1899	"	Des Moines.	Zearing.	
5483	Sanders, W. O.	May	9, 1899	By examination	Manly.	Osga.	
5484	Soleman, F. A.	July	6, 1899	Graduate	Tama.		
5485	Serr, E. L.	July	6, 1899	"	Blount City.		In N. Dakota.
5486	Scott, J. McDonald.	July	6, 1899	"	Dubuque.		In Illinois.

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5786	Scheldorf, W. D.	August 1, 1899	By examination.	Manning.	Anamosa.	
5789	Smith, S. M.	September 5, 1899	Graduate.	Perry.	Burnside.	
5807	Soll, A. R.	September 5, 1899	By examination.	Dubuque.	De Soto.	
5814	Stensrud, Albert.	September 5, 1899	By examination.	Lake Mills.		
5849	Sackett, W. L.	September 9, 1899	Graduate.	Ottumwa.		
5849	Stouder, Maxon R.	November 9, 1899	By examination.	Des Moines.		
5857	Sturpavant, J. N.	November 9, 1899	By examination.	Des Moines.		
5861	Stubinrauch, F. D.	November 9, 1899	By examination.	Pella.		
5870	Searle, Harry L.	December 5, 1899	Graduate.	Des Moines.	Sheldon.	
5878	Sherman, James E.	December 5, 1899	By examination.	Fort Dodge.		
5877	Shepard, J. Frank.	December 2, 1900	By examination.	Villisca.	Red Oak.	
5889	Scotfield, Clyde B.	January 2, 1900	Graduate.	Des Moines.	Maxburg.	
5898	Schimming, J. G.	January 2, 1900	By examination.	Cresco.	Waukon.	
5909	Smith, Emory A.	February 6, 1900	By examination.	Wyoming.	Woodward.	
5925	Smith, F. W.	February 6, 1900	By examination.	Audubon.		
5941	Stinson, Kent T.	March 6, 1900	Graduate.	Gravety.		
5945	Shane, Frank.	March 6, 1900	By examination.	Beacon.	Eldora.	
5959	Schroeder, Bernard H.	March 8, 1900	Graduate.	West Point.	Ft. Madison.	
5988	Scott, Frank J.	April 3, 1900	By examination.	Montour.	Sac City.	
5995	Switzer, Arnold W.	April 3, 1900	By examination.	Pilot Mound.	Runnells.	
6008	Stump, Wilbur H.	May 1, 1900	Graduate.	Toledo.	Center Point.	
6008	Stansbury, Howard E.	May 1, 1900	As assistant.	Spencer.	Odeboldt.	
6014	Severin, A. L.	May 1, 1900	Graduate.	Cedar Falls.	Fort Dodge.	
6018	Schlier, H. A.	May 1, 1900	By examination.	Carroll.	Earling.	
6019	Schneider, Chas. F.	May 1, 1900	By examination.	Kingley.		
6024	Schmalzer, Ed.	May 5, 1900	Graduate.	Des Moines.		
6032	Schmalzer, Frank E.	June 3, 1900	Graduate.	Des Moines.	California.	
6031	Stephenson, J. O.	June 3, 1900	Graduate.	Milford.	Minnesota.	
6038	Shaw, J. A.	July 8, 1900	As assistant.	Mt. Vernon.		
6054	Stedenschnur, J. W.	July 8, 1900	By examination.	Eatherville.	Cedar Rapids.	
6056	Stephenson, R. B.	July 8, 1900	By examination.	Clearfield.		
6056	Shurts, C. Y.	July 8, 1900	By examination.	Sigourney.	Oakalosa.	
6059	Stephenson, Wm. P.	August 7, 1900	Graduate.	Des Moines.		
6101	Stugfred Wm. P.	August 7, 1900	Graduate.	Keokuk.		
6102	Strain, Wm. P.	August 7, 1900	By examination.	Hawkeye.	Laramie, Wyo.	
6107	Smith, Fred E.	August 7, 1900	By examination.	Des Moines.		
6109	Schneider, Fred W.	August 7, 1900	By examination.	West Union.	Illinois.	

6118	Slaughter, Geo. A.	September	4, 1900	Graduate	Des Moines	Aredale.
6119	Schultz, Geo. F.	September	4, 1900	By examination	Nesque	Indiana.
6120	Schultz, Chas. H.	October	2, 1900	Graduate	De Mar	
6121	Seaphan, Charles W.	October	2, 1900		Debuque	
6122	Stenmo, Martin T.	November	8, 1900	"	Des Moines	Hatton, N. D.
6123	Steuilly, Thos. A.	November	8, 1900	"	Cedar Rapids	Whittemore.
6124	Spier, Escoe V.	November	8, 1900	"	Des Moines	Hedrick.
6125	Stearns, Geo. N.	December	4, 1900	By examination	Collins	
6126	Swartz, Frank G.	December	4, 1900	"	Silver City	Sidney.
6127	Shaw, H. F.	December	4, 1900	"	Bancroft.	
6128	Shaw, Ben H.	December	4, 1900	"	Eagle Grove.	
6129	Smith, Arthur E.	December	4, 1900	"	Indianola	
6130	Smith, J. W.	January	1, 1901	Graduate	Centerville	Red Oak
6131	Stabum, John	January	5, 1901	By examination	Elberon	Chilesa.
6132	Stahar, Geo. Z.	February	5, 1901	"	Marengo	Spencer.
6133	Schubert, B. H.	February	5, 1901	As assistant	La Porte City	
6134	Schmidt, S. William.	March	5, 1901	Graduate	Kennett	Mason City.
6135	Shaw, L. B.	April	2, 1901	By examination	Britt	Strawberry Point.
6136	Soren, Clarence F.	April	2, 1901	"	Marion	Cedar Rapids.
6137	Spradley, Will L.	April	2, 1901	Graduate	Harper	Sioux Center.
6138	Schadalek, Nick	May	7, 1901	"	Orange City	
6139	Schadalek, H. J.	May	7, 1901	"	Davenport	Montour.
6140	Scheller, Peter M. A.	May	7, 1901	"	Tama	
6141	Stacy, Joseph	May	7, 1901	"	Britt	Audubon.
6142	Stayer, Robt. H.	May	7, 1901	By examination	Oaklaosa	Fairfield.
6143	Stein, J. R.	May	7, 1901	"	Pella	
6144	Sloan, Nelson A.	May	7, 1901	"	Trar.	
6145	Smith, Ray J.	May	7, 1901	Graduate	Stacyville.	
6146	Schen, Henry	June	4, 1901	By examination	Waterloo	Washington.
6147	Schroger, John Q. A.	June	4, 1901	Graduate	Council Bluffs.	Kansas.
6148	Schots, John W.	August	4, 1901	"	Chamberland.	Minnesota.
6149	Shultz, S. R.	August	6, 1901	Graduate	Hancock	Minnesota.
6150	Sears, H. B.	August	6, 1901	"	Murray	Illinois.
6151	Schaff, C. H.	August	6, 1901	"	Des Moines	
6152	Stadford, LeRoy	August	6, 1901	"	Des Moines	
6153	Scholtzen, J. P.	September	2, 1901	"	Des Moines	
6154	Stadon, John J.	September	2, 1901	"	Des Moines	
6155	Sammels, H. N.	October	1, 1901	By examination	Des Moines	
6156	Schultz, H. N.	October	1, 1901	"	Oaklaosa	Ashley.
6157	Symons, W. J.	October	1, 1901	"	Sioux City	
6158	Sluger, A. F.	October	1, 1901	"	Keeauqua.	
6159	Sloan, R. E.	October	1, 1901	Graduate	Rock Valley	Boxholm.
6160	Schemmer, John	November	7, 1901	By examination	Sioux Rapids	Pleasantville.
6161	Steen, H. C.	December	8, 1901	"	Debuque	
6162	Schula, Will F.	December	8, 1901	"	Des Moines	
6163	Scherry, E. B.	January	7, 1902	Graduate	Fordson	Humboldt.
6164	Strayer, W. G.	March	4, 1902	"	Hudson	
6165	Swain, J. W.	April	1, 1902	"	Vinton	
6166	Strong, H. L.	April	1, 1902	"	Iowa City	
6167	Sullivan, P. F.	April	1, 1902	"		South Dakota.

## ABSTRACT—CONTINUED.

Number of certificate	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6622	Shull, H. W. ....	April 1, 1902	Graduate .....	Iowa City .....	Waterloo.	
6623	Stotts, O. D. ....	April 1, 1902	By examination.	Yale .....		
6624	Schneman, B. W. ....	April 1, 1902	Graduate .....	Des Moines.	Manila.	Indiana.
6625	Sutton, R. H. ....	April 22, 1902	Graduate .....	Shenandoah .....		
6626	Saerman, R. H. A. ....	May 5, 1902	" .....	Des Moines.	Des Moines.	
6627	Shark, O. W. ....	May 5, 1902	" .....	Newton.		
6628	Shank, A. B. ....	May 5, 1902	" .....	Waterloo.		
6629	Stani, E. E. ....	May 5, 1902	By examination.	Bancroft.	Swes City.	
6630	Smith, C. C. ....	June 3, 1902	Graduate .....	Clarksville .....	Des Moines.	
6631	Simmons, V. M. ....	June 3, 1902	By examination.	Albia.	Chapin.	
6632	Steglein, Chas. A. ....	June 3, 1902	" .....	Des Moines.		
6633	Songster, J. W. ....	June 20, 1902	Graduate .....	Council Bluffs .....		
6634	Sager, A. D. ....	July 8, 1902	By examination.	Dexter .....	Perry.	In Nebraska.
6635	Shipley, Geo. U. ....	July 8, 1902	" .....	Sheldon.		In Oklahoma.
6636	She-man, Fort .....	July 8, 1902	" .....	Washington.		
6637	Smith, A. N. ....	July 8, 1902	" .....	Winnetset.	Des Moines.	
6638	Smith, A. N. ....	July 8, 1901	" .....	George.		
6639	Shreve, B. F. ....	July 8, 1902	" .....	St. Charles.	Garden City.	
6640	Schultz, A. F. ....	July 8, 1902	Graduate .....	Remsen.		
6641	Stemmer, Chas. F. ....	August 5, 1902	" .....	Strawberry Point .....	Dundee.	
6642	Schaeffer, John .....	August 5, 1902	" .....	Mitchellville .....	Hawarden.	
6643	Scott, Chas. A. ....	August 5, 1902	" .....	Paulina .....	Mechanicsville.	
6644	Skogland, Edward .....	August 5, 1902	" .....	Dayton .....		
6645	Sanders, L. M. ....	August 5, 1902	" .....	Des Moines.	Cedar Rapids.	South Dakota.
6646	Smith, W. O. ....	August 5, 1902	" .....	Clinton .....	Charter Oak.	
6647	Shannon, R. L. ....	August 5, 1902	By examination.	Shellsburg .....	Galt.	
6648	Saults, J. S. ....	August 21, 1902	Graduate .....	Des Moines.		In Wisconsin.
6649	Schwartz, J. E. Charles .....	August 21, 1902	" .....	Des Moines.		In Illinois.
6650	Svedenborg, Chas. ....	October 7, 1902	" .....	Des Moines.		In S. Dakota.
6651	Stephens, R. E. ....	October 7, 1902	" .....	Davenport.		
6652	Syversen, R. B. ....	October 7, 1902	" .....	Decorah .....		
6653	Schwartz, H. L. ....	October 7, 1902	" .....	Ackley .....	Belmond.	
6654	Schwartz, Chas. H. ....	October 7, 1902	" .....	Des Moines.	Miller.	
6655	Smith, Est. P. ....	October 7, 1902	By examination.	Indianola.		
6656	Schmitz, Henry .....	October 7, 1902	" .....	Storm Lake.		
6657	Starbuck, J. N. ....	October 7, 1902	" .....	Marion.		

Stamberg, Lorenz.....	October	1907	By examination.....	Kimballton.	1907	Kimballton.
Starnes, H. O.....	October	1907	.....	Desoto.	1907	Desoto.
Stark, J. C.....	November	1907	Graduate.....	Battle Creek.	1907	Woolstock.
Sack, Bertrand.....	December	1907	.....	Ripley.	1907	
Seamans, A. L.....	December	1907	By examination.....	Akron.	1907	
Seany, Roy L.....	December	1907	.....	Thornton.	1907	
Seaton, F. L.....	March	1908	Graduate.....	Davenport.	1908	
Seigrist, W. H.....	March	1908	.....	Red Oak.	1908	
Schreiner, H. B.....	March	1908	.....	Belmond.	1908	
Schullman, Vance.....	April	1908	.....	Council Bluffs.	1908	Conrad.
Stallman, M. B.....	April	1908	By examination.....	Webster City.	1908	Spencer.
Saverson, O. L.....	April	1908	.....	Jewell.	1908	Kelly.
Sidnes, O. L.....	April	1908	Graduate.....	Huxley.	1908	Grafton.
Saverdell, J. A.....	May	1908	.....	Story City.	1908	Huxley.
Sawyer, H. A.....	June	1908	By examination.....	Le Mars.	1908	
Shen, C. H.....	June	1908	.....	Odebolt.	1908	
Sprague, E. C.....	June	1908	.....	Winterset.	1908	Earling.
Speake, S. S.....	July	1908	Graduate.....	Des Moines.	1908	Indiana.
Sharpe, H. A.....	July	1908	.....	Des Moines.	1908	Wisconsin.
Small, G. E.....	July	1908	.....	Des Moines.	1908	W.oming.
Spears, Benjamin.....	July	1908	.....	Des Moines.	1908	Indiana.
Swanson, H. O.....	July	1908	.....	Des Moines.	1908	Riverton.
Sprague, P. F.....	July	1908	.....	Essex.	1908	
Smith, Eva M.....	July	1908	.....	Russell.	1908	
Scott, Edna F.....	July	1908	.....	Des Moines.	1908	
Scott, F. W.....	July	1908	.....	Des Moines.	1908	
Swarth, H. L.....	July	1908	By examination.....	Sheffield.	1908	
Scar, E. L.....	July	1908	.....	Des Moines.	1908	Earlham.
Shaw, P. O.....	August	1908	Graduate.....	Avoca.	1908	Minnesota.
Sand, Berri V.....	August	1908	.....	Thurman.	1908	
Simmons, G. T.....	August	1908	.....	Ollerton.	1908	
Spavin, C. H.....	August	1908	.....	Des Moines.	1908	
Snyder, J. H.....	August	1908	.....	Clarion.	1908	
Smith, Howard L.....	October	1908	.....	Grundy Center.	1908	Laporte.
Slickfort, W. W.....	October	1908	.....	Maryland.	1908	
Schlotter, Gustave.....	October	1908	.....	Garnavillo.	1908	
Swan, G. R.....	October	1908	.....	Essex.	1908	South Dakota.
Schinker, K. L.....	October	1908	.....	Council Bluffs.	1908	Colorado.
S-dmore, L. E.....	October	1908	.....	Des Moines.	1908	Cedar Rapids.
Smith, S. O.....	October	1908	By examination.....	Fairfield.	1908	Unionville.
Summers, T. R.....	October	1908	.....	Nevada.	1908	
Secor, H. E.....	November	1908	Graduate.....	Van Meter.	1908	
Stinson, Charlotte E.....	December	1908	.....	Des Moines.	1908	Illinois.
Steiner, N. W.....	December	1908	.....	Des Moines.	1908	Illinois.
Swartz, Ed.....	December	1908	.....	Des Moines.	1908	Nebraska.
Schuyler, W. E.....	December	1908	By examination.....	Silver City.	1908	Le Mars.
Shinn, Edgar.....	December	1908	.....	Sargent Bluff.	1908	
Saxer, A. H.....	February	1909	.....	West Bend.	1908	Washington.
Smith, G. F.....	February	1909	Graduate.....	Des Moines.	1909	Waukon.
Snyder, C. H.....	February	1909	.....	Keokuk.	1909	Ohio.
	February	1909	.....	Des Moines.	1909	

## ABSTRACT—CONTINUED.

Number of cer- tificates	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
7315	Scroggs, J. G.	February 1904	By examination	Clarinda.	Hillsboro.	
7316	Scott, O. L.	February 1904	"	St. Madison.		
7317	Springfellow, L. H.	February 1904	"	Des Moines.		
7332	Schmidt, J. B.	April 1904	Graduate	Lytton.	Wisconsin.	
7333	Shaner, L. G.	April 1904	"	Kokuk.	Iowa.	
7331	Sherlock, W. P.	April 1904	"	Kennettburg.	Leaok.	
7335	Shearly, G. E.	April 1904	"	St. Liberty.	Indiana.	
7335	Smith, J. O.	April 1904	By examination	St. Clair.	Mechanicsville.	
7330	Stoakes, W. H.	April 1904	"	Grinnell.	Iowa Falls.	
7330	Smith, H. G.	May 1904	Graduate	Des Moines.	Tennessee.	
7331	Scarf, H. H.	May 1904	"	Des Moines.	Minnesota.	
7332	Sauerwein, P. E.	May 1904	"	Kokuk.	Sumner.	
7333	Soll, H. T.	May 1904	"	Avoca.	Illinois.	
7334	Starrett, K. S.	May 1904	By examination	Atlantic.	Mechanicsville.	
7405	Schroeder, John.	June 1904	"	Burt.		
7406	Stahl, Pearl L.	June 1904	"	Kokuk.		
7407	Scott, L. E.	June 1904	"	Holstein.		
7408	Solley, Peter.	June 1904	"	Guthrie Center.		
7423	Selby, E. S.	July 1904	Graduate	Webster City.		
7443	Schroeder, J. W.	July 1904	By examination	Hampton.		
7449	Schultz, A. A.	July 1904	"	Schleswig.		
7479	Schultz, A. E.	August 1904	"	Des Moines.	Illinois.	
7480	Slifer, C. D.	August 1904	"	Winfield.		
7481	Smiley, J. A.	August 1904	Graduate	Mondamin.		
7485	Stuart, W. L.	August 1904	"	Davenport.		
7488	Speetzen, G. C.	August 1904	"	Siacyville.		
7489	Scheu, C. H.	August 1904	"	Nora Springs.		
7499	Shreckler, C. D.	August 1904	By examination	Maxwell.		
7500	Strombeck, O. F.	August 1904	"	Des Moines.	East Peru.	
7502	Smith, J. G.	October 1904	Graduate	Cedar Rapids.	Illinois.	
7508	Stump, F. A.	October 1904	"	Oxford.	Indiana.	
7509	Stoppenbeck, E. D.	October 1904	Graduate	Des Moines.	South Dakota.	
7510	Spratt, E. L.	October 1904	"	Des Moines.	Collins.	
7525	Satrang, E. T.	October 1904	By examination.	Jewell.		
7529	Sperry, M. W.	October 1904	Graduate	Des Moines.		
7540	Swift, H. M.	December 1904	By examination.	Algona.		
7545	Sheetz, C. A.	December 1904	"			

7657	Swayze, C. A. ....	December	6, 1904	By examination	Fairfield	Eldora.
7678	Sullivan, Ellen V. ....	February	7, 1905	Graduate	Des Moines	
7674	Stine, Hymen ....	February	7, 1905	"	Toledo	
7676	Schenk, A. L. ....	February	7, 1905	"	Lyons	Ohio.
7676	Strong, J. T. ....	February	7, 1905	"	Des Moines	Des Moines.
7696	Schaub, F. J. ....	April	4, 1905	By examination	Le Mars	
7697	Stevens, Peter ....	April	4, 1905	"	West Side	
7698	Sork, H. H. ....	April	4, 1905	"	Hawkeye	
7610	Steel, Hugh ....	April	22, 1905	Graduate	Des Moines	
7613	Swenson, H. L. ....	April	22, 1905	"	Des Moines	
7640	Swan, J. F. ....	June	6, 1905	"	Walker	
7641	Schlicht, M. F. ....	June	6, 1905	"	Cedar Rapids	Springville.
7642	Staeck, Hugo F. ....	June	6, 1905	"	Maquoketa	
7645	Severson, A. J. ....	June	6, 1905	By examination	Jewell Junction	
7646	Skinner, R. K. ....	June	19, 1905	Graduate	Winterset	Webster City.
7677	Stark, T. H. ....	July	12, 1905	"	Walker	
7678	Seymour, Edith M. ....	July	12, 1905	By examination	Iowa City	
7711	Shaffer, J. A. ....	July	12, 1905	"	Williams	Missouri.
7711	Smith, F. B. ....	July	12, 1905	"	Randall	Ohio.
7719	Schwab, A. J. ....	August	1, 1905	Graduate	Casper	
7732	Smith, W. D. ....	August	1, 1905	"	Grayson	
7741	Smith, J. C. ....	August	1, 1905	"	Des Moines	
7745	Stevens, E. H. ....	August	1, 1905	By examination	Council Bluffs	Living Springs.
7754	Spengler, J. A. ....	August	1, 1905	"	Ackley	
7761	Schaefer, John ....	August	9, 1905	"	Dubuque	
187	Thullinger, W. B. ....	June	5, 1900	As owner	Paragut	
327	Trumbull, W. H. ....	June	4, 1900	As assistant	Dubuque	
421	Toothman, G. F. ....	June	4, 1900	As owner	Dubuque	
484	Trubshaw, John ....	June	4, 1900	"	Earlsboro	Ottumwa.
555	Tabor, B. W. ....	June	9, 1900	"	Independence	
1279	Taylor, Charles O. ....	June	16, 1900	"	Ottumwa	
1361	Toover, William ....	June	7, 1900	"	Victor	Tennessee.
1664	Teed, George W. ....	June	23, 1900	As principal	Webster City	
1708	Thompson, J. O. ....	July	23, 1900	By examination	Ottumwa	Newton.
1783	Thomas, Louis ....	August	2, 1900	"	Stuart	
1851	Treat, Joseph A. ....	July	30, 1900	"	Fort Madison	Mt. Pleasant.
1867	Thomas, Camp ....	September	2, 1900	"	Avoca	
1946	True, O. E. ....	October	23, 1900	"	Geneva	
1948	Tidd, O. H. ....	September	7, 1900	"	Monticello	Walnut.
2174	Narka, Herman ....	September	2, 1900	"	Marne	
2578	Thompson, E. C. ....	June	6, 1902	"	Northwood	
2578	Thompson, Nels ....	June	20, 1902	"	Lenox	
2578	Tyler, Oscar D. ....	July	23, 1902	"	Greencastle	Colfax.
2657	Turner, L. C. S. ....	February	3, 1903	"	Green Mountain	Des Moines.
2768	Tobey, E. F. ....	July	3, 1903	"	White Cheer	White City.
3297	Thomas, J. C. ....	May	24, 1887	"	Nevada	Wauke.
3297	Thompson, R. K. ....	June	21, 1887	"	Des Moines	Waterloo.
3860	Turner, G. A. ....	August	16, 1887	"	Des Moines	
3899	Thompson E. T. ....	December	27, 1887	"	Audubon	Sioux City.
3499	Thompson E. T. ....	March	20, 1888	"		

## ABSTRACT—CONTINUED.

Number of certificates.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
8467	Taylor, James F.	July	By examination	Salix.	.....	In Missouri.
8468	Thomas, C. E.	July	"	Williamsburg	Mapleton.	"
8469	Talbot, J. H.	August	"	Castana	"	"
8511	Taylor, L. M. C.	August	"	Fredericksburg.	"	"
8646	Thelander, C. C.	April	"	Stout City.	Carroll.	In N. Carolina.
8698	Tainter, E. B.	August	"	Delwin	.....	In California.
8714	Thormann, A. W.	August	"	Dubuque	Arizona.	"
8724	Teefey, Daniel.	September	"	.....	Anson.	"
8735	Toogood, Charles C.	September	"	.....	Low Falls.	"
8845	Tipton, W. L.	October	"	.....	Collins.	"
4068	Traverse, C. C.	July	"	.....	Bloomfield	"
4147	Tyler, M. G.	November	"	.....	Goldfield	"
4191	Twiford, L. O.	March	"	.....	Spirit Lake	"
4194	Taylor, Harry E.	March	"	.....	Creston	"
4353	Thomas, Charles J.	January	"	.....	Des Moines	"
4350	Talbot, A. D.	January	"	.....	Brooklyn	"
4377	Taylor, C. W.	February	"	.....	Carroll	"
4381	Thomas, John M.	January	Graduate	.....	Postville.	"
4440	Taylor, John R.	April	By examination	Waterloo.	.....	"
4473	Torrence, J. D.	June	"	Kanrar	.....	"
4536	Thurlmann, Ed.	August	"	Carroll	.....	So. Dakota.
4594	Toole, Charles O.	January	"	Escherville	.....	"
4624	Taylor, Charles J.	January	"	Greenfield	Adel.	Missouri.
4711	Tatman, Pearl J.	August	"	Gen Mills	.....	"
4740	Tobey, Matt J. S.	August	"	Des Moines.	Richland	"
4743	Thorne, Matt J.	October	"	Davenport	Utumwa.	"
4793	Thorne, Matt J.	December	"	Central City	.....	"
4825	Trumbull, W. A.	January	"	Adair	.....	"
4826	Trumbull, Lucius	April	"	Des Moines	.....	Oklahoma.
4828	Talbot, Thomas	July	"	Colfax	West Liberty.	"
4829	Talbot, E. F.	October	"	Monroe	Rowley.	"
4838	Trappier, W. J.	February	"	Carroll	.....	"
5010	Thurlmann, Leo	March	"	Corwith	Mason City.	"
5031	Tiss, G. J.	March	"	Murray	.....	Washington.
5100	Todd, G. A.	April	Graduate	Adair	.....	Washington.
5107	Trumbull, Mrs. L. F.	June	By examination	Dubuque	.....	Illinois.
5186	Torrence, G. W.	July	"	Dubuque	.....	"
5192	Tisdale, W. H.	January	"	State Center	West Union.	"

5301	Teuscher, David	February	2, 1897	By examination	Victor	Keota.
5302	Trumbull, E. J.	April	6, 1897	"	Union	Conrad.
5303	Twining, E. Leroy	April	6, 1897	"	Des Moines.	
5304	Todd, J. A.	July	8, 1897	"	Waterloo.	
5305	Thomas, J. J.	July	8, 1897	"	Whiting.	
5306	Thomas, S. R.	July	6, 1897	"	Fairfield.	
5307	Thomas, S. R.	October	6, 1897	"	Des Moines.	Randolph.
5308	Thomas, S. R.	December	7, 1897	"	Osgo.	Greene.
5309	Tobin, C. B. S.	December	7, 1897	"	Centerville.	
5310	Taylor, J. B.	April	8, 1898	Graduate	Vinton	Urbana.
5311	Tague, Marion S.	March	8, 1898	By examination	Charles City.	
5312	Tubbs, H. S.	May	7, 1898	"	Des Moines.	California.
5313	Treat, J. W.	June	7, 1898	"	Albia.	In Illinois.
5314	Trimble, Rose	August	8, 1898	Graduate	Wyoming	
5315	Thompson, E. T.	May	2, 1899	By examination	Des Moines.	
5316	Thompson, E. T.	May	2, 1899	"	Waterloo.	
5317	Talty, N. A.	July	6, 1899	Graduate	Des Moines.	
5318	Tyndale, G. S.	August	1, 1899	"	Iowa City.	
5319	Teeters, W. J.	August	1, 1899	"	Stanhope.	
5320	Thorson, Edward	September	6, 1899	"	Des Moines.	
5321	Taylor, Amelia V.	November	9, 1899	"	Badger.	Paulina.
5322	Trent, Will W.	November	9, 1899	"	Oceola.	Albia.
5323	Trimbo, Joseph H.	November	9, 1899	By examination	Des Moines.	
5324	Thomas, William	January	2, 1900	Graduate	Aurora.	Harcourt.
5325	Tomaszek, Joseph	February	6, 1900	By examination	Clear Rapids.	Rockford.
5326	Taggart, Hugh W.	February	6, 1900	"	Waterloo.	
5327	Tate, P. M.	June	6, 1900	"	Schaller.	Dunlap.
5328	Trowbridge, D. L.	September	6, 1900	Graduate	Des Moines.	
5329	Thiesman, R. J.	October	2, 1900	By examination	Des Moines.	
5330	Thiesman, H. C.	November	8, 1900	Graduate	Des Moines.	
5331	Taggart, Homer G.	January	7, 1901	"	Story City.	Montgomery.
5332	Toung, Robert A.	May	7, 1901	By examination	Waterloo.	
5333	Tilden, Chas. G.	May	7, 1901	"	Stanhope.	Riverside.
5334	Thompson, J. S.	August	6, 1901	Graduate	Des Moines.	
5335	Tobin, J. H.	September	2, 1901	"	Newton.	Colfax.
5336	Tomley, Chas. D.	October	1, 1901	"	Des Moines.	Iowa Falls.
5337	Thackeray, James	October	1, 1901	"	Des Moines.	
5338	Turner, Henry	October	1, 1901	"	Des Moines.	
5339	Thurston, E. S.	April	1, 1902	By examination	Northwood.	
5340	Thurston, E. S.	April	1, 1902	"	Village.	Ledyard.
5341	Thurston, E. O.	May	1, 1902	Graduate	Columbus Junction.	
5342	Thos, T. A.	August	5, 1902	"	Village.	
5343	Thompson, L. S.	August	5, 1902	"	Walnut.	Oakalosa.
5344	Townsend, T. R.	August	5, 1902	"	Des Moines.	South Dakota.
5345	Tigner, R. N.	August	5, 1902	"	Columbus City.	Hampton.
5346	Torgerson, Thomas	August	5, 1902	"	Farmerville.	Laurens.
5347	Torgerson, Chas. W.	August	5, 1902	"	Lake Mills.	Clear Lake.
5348	Torgerson, Chas. W.	October	7, 1902	"	Des Moines.	In Indiana.

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6890	Treber, J. A.	December 2, 1902	Graduate	Cedar Rapids		In S. Dakota.
6931	Tonner, G. B.	February 3, 1903	"	Des Moines		In Nebraska.
6932	Tyler, W. O.	February 8, 1903	"	Des Moines		In Illinois.
6933	Thoma, W. E.	February 8, 1903	"	Des Moines		In Illinois.
6934	Thome, John	February 8, 1903	By examination	Dubuque	Clinton	
6939	Toby, Chas.	February 8, 1903	"	Cedar Rapids		
6970	Thomas, E. U.	March 6, 1903	Graduate	Sheldon	Granville	
6984	Taylor, J. E.	April 7, 1903	"	Des Moines		
7018	Tank, Julius.	May 5, 1903	"	Manning	Dunlap	
7027	Turner, J. A.	February 2, 1903	By examination	Clarion	Illinois	
7042	Tabor, Elmer	February 2, 1903	"	Waterloo		
7043	Todd, C. F.	February 2, 1903	"	Oerwith		
7044	Tiss, A. E.	February 2, 1903	"	Stout City	Goldfield	
7066	Thomas, E. J.	August 4, 1903	Graduate	Stout City	Stout City	
7180	Thompson, O. T.	August 4, 1903	"	Roland	Bradfield	
7181	Trickett, G. W.	August 4, 1903	"	Des Moines	Marne	
7183	Thompson, W. M.	August 9, 1903	"	Des Moines	Winton	
7233	Thomas, A. E.	November 9, 1903	"	Louis Falls		
7234	Thomas, R. B.	November 9, 1903	"	Burton		
7235	Tout, G. E. R.	December 1, 1903	By examination	Independence		
7313	Tout, G. E. R.	February 5, 1904	"	Des Moines	Nebraska	
7381	Thernston, C. W.	April 8, 1904	"	Fonda	Iowa Falls	
7389	Thompson, G. H.	May 20, 1904	Graduate	Des Moines	Indiana	
7390	Thompson, J. H.	May 20, 1904	By examination	Cedar Rapids		
7410	Widhall, A. J.	June 7, 1904	"	Clarinda		
7416	Wustland, J. R.	June 7, 1904	"	Badger		
7449	Towne, E. R.	July 1, 1904	Graduate	Boone		
7469	Towne, E. R.	August 2, 1904	By examination	Northwood	Davenport	
7491	Thies, Frank	August 2, 1904	"	Keokuk City	East Port	
7493	Thompson, W. H.	August 6, 1905	"	Des Moines	Illinois	
7633	Thompson, O. E.	January 12, 1905	Graduate	Des Moines	Pennsylvania	
7638	Taylor, J. E.	July 12, 1905	"	Des Moines	Illinois	
7703	Taylor, J. E.	July 12, 1905	"	Des Moines		
7705	Taylor, F. A.	August 1, 1905	"	Decorah		
7804	Udall, A. B.	August 12, 1905	"	Ottumwa		
7924	Underwood, P. A.	January 18, 1906	As owner	Des Moines		
8028	Underwood, Poe	June 2, 1906	By examination	Ottumwa	Birmingham	In Oklahoma.
4416	Ullam, S. A.	April 1, 1904	"	Vinton		
4792	Ulmer, M.	September 18, 1904	"	Dubuque		
4813	Underwood, William.	February 5, 1905	"	Elkader	Dexter	

5395	Undergrad, S. L.	October	4, 1898	By examination	Des Moines.	Dallas Center.	In Illinois
5396	Uhrus, F. W.	November	1, 1898	Graduate	Burlington	California.	
5397	Udel, Nathan	February	6, 1900	By examination	Centerville	Harris.	
5398	Unz, O. F.	March	7, 1900	"	Kingsley	Tabor.	
5399	Underwood, J. J.	June	4, 1901	Graduate	Sharpsburg	Des Moines.	
5400	Uleh, J. J.	December	4, 1901	"	Sherborn	Bancroft.	
5401	Underkroter, G. B.	August	1, 1902	As owner	Belmond		
5402	Van Cise, Isaac	June	6, 1890	"	Belle Plaine.		
5403	Van Meter, James	June	6, 1890	"	Mt. Pleasant.		
5404	Vitatos, Hiram O.	July	6, 1890	As principal	Harper	Ollie.	
5405	Van Veen, Isaac T.	January	17, 1891	By examination	Minden.	Neola.	
5406	Van Warden, L.	January	27, 1892	"	Leon		In Indiana.
5407	Van Leuven, G. M.	February	27, 1892	"	Lime Springs.		
5408	Warner, William	April	27, 1893	"	Angelo		
5409	Vincent, George	February	2, 1893	Graduate	St. Charles	Des Moines.	
5410	Van Audsall, G. M.	February	6, 1899	By examination	New London.		
5411	Vanden, J. E.	June	11, 1899	"	Scranton.	Gowrie.	
5412	Vail, Ed. Morris.	May	8, 1901	"	Leon		
5413	Vail, Ed. Morris.	November	10, 1901	"	Marshalltown.		
5414	Vickens, Will	February	6, 1894	"	Des Moines.	New Sharon.	
5415	Vickens, Paul B.	March	7, 1895	"	Oskaloosa		
5416	Von Delden, Egbert.	April	6, 1896	"	Granville.	Chicago, Ill.	
5417	Valerius, Matt.	May	5, 1896	"	Clinton		
5418	Vesnak, J. H.	May	5, 1896	"	Harper.		
5419	Vogel, G. L.	October	6, 1896	"	Cedar Rapids.		
5420	Vogel, H. A.	December	1, 1896	"	Renwick	Ottosen.	
5421	Vogel, Dick	August	20, 1896	"	Storm Lake	Newell.	
5422	Varnum, Ray	August	8, 1898	By examination	Des Moines.	Sioux City.	
5423	Vickers, Grant	July	18, 1899	Graduate	Davenport.	Rock Rapids.	
5424	Vogt, Carl A.	November	9, 1899	"	Pella.	Mt. Vernon.	In Missouri.
5425	Von Donatslar, Rachelle.	August	7, 1900	"	Des Moines.		In Nebraska.
5426	Van Dyke, L. B.	August	8, 1901	By examination	Sioux City		In Illinois.
5427	Vredland, J. M.	September	8, 1901	Graduate	Sigourney		In Kansas.
5428	Valerius, Michael	October	1, 1901	"	Linville.		
5429	Vincent, J. B.	October	1, 1901	By examination	Grinnell.		
5430	Viet, H. L.	February	4, 1902	Graduate	Atlantic		
5431	Van Den Burg, Guy	April	1, 1902	By examination	Melbourne.		
5432	Voss, C. E.	December	2, 1902	Graduate	Muscatine.		
5433	Violet, J. C.	October	4, 1903	By examination	Winterset.		
5434	Viering, J. A.	February	2, 1904	Graduate	Des Moines.		
5435	Vibber, H. R.	June	6, 1905	By examination	Muscatine.	Nebraska.	
5436	Von Steenburg, Linas.	August	1, 1905	"	Albia.		
5437	Webb, John B.	June	4, 1890	As owner	De Witt.		
5438	Welch, George H.	June	19, 1890	"	Boone.		
5439	Wilkin, R. D.	June	4, 1890	"	Atlantic.		
5440	Wise, C. A.	June	4, 1890	"	Cedar Falls.		
5441	Wilson, L. L.	June	18, 1890	"	Center Point.		

## ABSTRACT—CONTINUED.

Number of certificates	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
415	Walker, S. B.	June 23, 1880	As owner	Calamus.		
450	Wunderlich, G. W.	June 5, 1880	As assistant	Dubuque.		
523	Walker, William A.	June 24, 1880	As owner	Ainsworth.		
555	Wolfgang, Al. J.	June 18, 1880	As assistant	Emmelsburg.		
605	Ward, Joseph A.	June 10, 1880	As owner	Gilman.		
607	Ward, William J.	June 10, 1880	"	Gilman.		
630	Williamson, W. R.	June 11, 1880	"	Hopkinton.		
632	Worth, Fordyce.	June 11, 1880	"	Hesper.		
675	Woodruff, M. W.	June 9, 1880	"	Knoxville.		
927	Weaver, A. R.	June 30, 1880	"	Chapin.	Salem.	
945	Wilson, O. R.	June 7, 1880	"	Northwood.		
979	Ward, C. H. W.	June 6, 1880	As assistant	Des Moines.		California.
1031	Willis, Arthur E.	June 5, 1880	As owner	Des Moines.		
1042	Wilson, James B.	June 9, 1880	As assistant	Perry.	Dana.	
1241	Webster, J. C.	June 8, 1880	"	Shenandoah.	Afton.	
1333	Wyman, J. H.	June 12, 1880	"	Unionville.		
1389	Wangler, C. D.	June 10, 1880	Graduate	Waterloo.		
1392	Wangler, R. O.	June 10, 1880	As assistant	Waterloo.		
1393	White, John H.	June 10, 1880	"	Burlington.		
1425	Witte, Henry G.	July 20, 1880	"	Atlanta.	Knorrville.	
1426	Wheeler, Henry H.	July 20, 1880	"	Iowa City.		
1453	Wilson, J. H.	August 7, 1880	"	New Virginia.		
1494	Wilson, J. J.	August 2, 1880	"	Corrisonville.	Des Moines.	
1523	Wells, Willis C.	August 4, 1880	By examination	Warfield.		
1777	White, George J.	October 12, 1880	As owner	Waubesa.		
1807	White, W. George J.	September 27, 1880	By "	Volga City.		
1860	White, A. C.	October 23, 1880	"	Oelwein.		
1867	Woodbridge, M. L.	October 19, 1880	"	Nashua.		
2004	Wood, Deane L.	February 21, 1881	"	Strawberry Point.	Waterloo.	
2203	Wright, W. M.	February 20, 1881	"	Kendall.	Correctionville.	
2347	Westbrook, C. H.	August 30, 1881	"	Andala.	Dedance.	
2353	Walsh, William F.	September 24, 1881	"	Oelwein.	Leon.	
2373	Wright, M. G. G.	September 14, 1881	"	Oelwein.	Katherville.	
2456	Wentworth, E. G.	November 17, 1882	"	Centerville.		
2495	Webb, Vernon S.	April 17, 1883	"	Elkora.	Cedar Rapids.	
2616	Wheaton, Charles.	April 30, 1883	"	Davenport.		Illinois.

3647	Ward, Perry	June	15, 1893	By examination	Waverly	Central City.
3648	Wilder, John J.	July	31, 1893	"	Early Junction	Kingsey.
3649	Will, F. D.	November	8, 1893	"	Knoxville	Des Moines.
3650	Wright, L. D.	May	6, 1894	"	Ma Pleasant	
3651	Wrobel, Theodore	May	8, 1894	"	Lehigh	Fort Dodge.
3652	Waldburger, J. C.	January	13, 1895	"	Independence	Panora.
3653	White, Ira	March	17, 1895	"	Outtrim	
3654	Whitson, A. H.	April	7, 1895	"	Rock Rapids	
3655	Whitson, J. E.	May	19, 1895	"	New Hampton	Elma.
3656	Wick, Will C.	October	6, 1896	"	Marshalltown	
3657	Wigley, Frank B.	March	19, 1896	"	Newton	Winterset.
3658	Wagner, O. N.	March	20, 1896	"	Fort Dodge	
3659	Wagner, Thomas F.	April	25, 1896	"	Fayette	
3660	Waterbury, D. D.	June	29, 1896	Graduate	Dubuque	
3661	Waterbury, D. D.	June	29, 1896	Graduate	Dubuque	
3662	Witmer, Joseph W.	July	9, 1896	By examination	Fayette	
3663	Williams, F. S.	November	23, 1896	"	Peterson	Winterset.
3664	Williams, J. L.	February	15, 1897	"	Mason City	Waverly.
3665	Wetherall, L. D.	February	23, 1897	"	Hampton	
3666	West, Frank J.	March	3, 1897	"	New Hartford	
3667	Wick, Rolin E.	March	15, 1897	"	Des Moines	Storm Lake.
3668	Whitney, E. F.	March	14, 1897	"	Lake View	
3669	Walrod, Mrs. C. J.	March	21, 1897	"	Moravia	
3670	Wills, D. H.	May	17, 1897	"	De Witt	Rolfe.
3671	Webb, Charles M.	May	17, 1897	"	Holstein	
3672	Walker, John T.	June	21, 1897	"	What Cheer	Council Bluffs.
3673	Whaley, Samuel E.	August	2, 1897	"	Bellevue	
3674	Wheeler, F. E.	October	4, 1897	"	Russell	Van Horn.
3675	Wirth, Cyrillus	November	8, 1897	"	Kingsey	
3676	Werts, Jacob L.	February	7, 1898	"	Grinnell	Ottumwa.
3677	Wilson, C. W.	March	5, 1898	Graduate	Des Moines	
3678	Wilson, C. W.	March	5, 1898	By examination	Des Moines	West Union.
3679	Wood, Frank F.	January	23, 1898	"	Mt. Ayr	
3680	Wheaton, George R.	July	14, 1898	"	Olermont	Rolfe.
3681	Warren, B. C.	September	19, 1898	"	St. Louis City	
3682	White, Fred W.	November	10, 1898	"	Mt. Carmel	
3683	Wasser, Lot E.	November	29, 1898	"	Conway	Waterloo.
3684	Wetzel, Joseph	February	19, 1899	"	Oakalosa	Des Moines.
3685	Wright, Frank	February	19, 1899	"	What Cheer	Hawarden.
3686	Walker, L. M.	April	14, 1899	"	McGregor	Hastie.
3687	Way, J. W.	May	3, 1899	"	Cambridge	Adair.
3688	Williams, J. Cal	May	27, 1899	"	Melbourne	
3689	Wood, George W.	June	6, 1899	"	Hedrick	Holstein.
3690	Whitfield, Arthur	September	6, 1899	"	Kingsey	
3691	Winfrey, T. H.	September	17, 1899	"	Milo	Mason City.
3692	Woodward, H. H.	November	26, 1899	"	Britt	
3693	Weller, R.	January	7, 1899	"	Ireton	
3694	Weller, O. L.	February	4, 1899	"		
3695	Wagh, Walter O.	February	18, 1899	"		
3696	Way, Bayard O.	February	26, 1899	"		
3697	Wilson, Lee S.	March	4, 1899	"		

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
3848	Wray, Walter L.	March 14, 1890	By examination	Oakalosa	Nevada.	Illinois.
3856	Wilson, Frank D.	March 18, 1890	"	Kookuk	"	"
3866	Wilson, James B.	March 31, 1890	"	Marion	"	"
3892	Wyland, A. O.	March 16, 1890	"	Underwood.	"	"
3909	Wise, C. H.	July 15, 1890	"	Cedar Falls.	Des Moines.	"
3940	Waterbury, F. C.	September 29, 1890	"	Marion.	Muscatine.	"
3946	Weaver, A. J.	October 7, 1890	"	Letts	"	"
3963	Wagner, Oscar F.	December 1, 1890	"	Alden.	"	"
3986	Walrath, B. B.	February 7, 1891	"	Brush Creek.	"	"
4011	West, William H.	March 7, 1891	"	Kellogg	Des Moines.	Minnesota.
4014	Weaver, O. A.	March 7, 1891	"	Le Grande	Hawkeye.	"
4038	Walker, D. J.	March 16, 1891	"	Fayette	Buxton.	"
4049	Williams, Jack	May 5, 1891	"	Oakalosa	Oakland.	"
4066	Williams, A. J.	May 8, 1891	"	Odebolt	Montezuma.	"
4067	Whaley, James A.	June 2, 1891	"	What Cheer.	Maquoketa.	"
4140	Walters, James A.	November 10, 1891	"	Des Moines	Mechanicsville.	"
4170	Walters, J. H.	February 2, 1892	"	Malcom	Oceola.	"
4176	Winchell, John E.	February 6, 1892	"	Tippon	"	"
4214	Welch, John W.	February 6, 1892	"	New Market.	"	"
4216	Walker, John C.	April 7, 1892	"	Des Moines	"	"
4230	Whitlock, C. E.	April 12, 1892	"	Newton	"	"
4240	Wetrick, Harry A.	April 7, 1892	"	Cascade	"	"
4240	Weber, John H.	July 26, 1892	"	Vail	"	Idaho.
4278	Watson, Charles	August 4, 1892	Graduate	Waterloo	Decorah.	"
4283	Wangler, Joseph P.	September 6, 1892	By examination	Webster City	"	Oklahoma.
4297	Whitacre, J. C.	December 9, 1892	"	Jewell Junction	Mason City.	"
4341	Waterbury, M. O.	January 9, 1893	"	Marshalltown.	"	"
4371	Woodard, Will C.	January 31, 1893	"	Newton	"	"
4390	Westbrook, Burr	January 18, 1893	Graduate	Scranton	"	"
4390	Willist, C. A.	March 10, 1893	By examination	Council Bluffs	"	Oklahoma.
4418	Wheeler, William B.	March 4, 1893	"	Council Bluffs	"	"
4423	Wesner, Fred W.	April 3, 1893	"	Bloomfield	Kalona.	"
4447	Wray, M.	May 4, 1893	"	Smithland.	"	"
4466	Wendell, Ed.	June 6, 1893	By examination	Sigourney.	"	"
4470	Weller, William	June 6, 1893	"	Post	Wapello.	"
4507	Woodruff, W. J.	August 31, 1893	"	Ottumwa.	Illinois.	"
4517	Walker, George L.	September 6, 1893	"	Montezuma.	"	"
4522	Wilson, Dr. George W.	September 26, 1893	"	Montezuma.	"	"



## ABSTRACT—CONTINUED.

Number of cert.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
5455	Winter, J. P.	April 5, 1893	By examination	Hubbard	Washington.	
5456	Weldin, C. D.	April 5, 1893	Graduate	Crawfordsville	Quasqueton.	
5457	White, W. M.	March 30, 1893	By examination	Maynard		
5458	White, W. H.	May 27, 1893	By examination	Manchester		
5459	Ward, J. J.	November 7, 1893	By examination	New City	Wellman.	
5460	Ward, H. T.	March 4, 1893	"	McC. Pleasant		
5461	Ward, A. B.	April 17, 1893	Graduate	Ellettsburg	Spokane.	
5462	Williams, A. J.	May 17, 1893	By examination	Wesley	Leater.	
5463	Webber, B. D.	May 2, 1893	By examination	Pella	Minnesota.	
5464	Wagoner, F. O.	May 2, 1893	"	Ridgeway	North Dakota.	
5465	Wagner, J. A.	May 4, 1893	"	Blomfield	Hedrick	
5466	Wagner, J. A.	July 1, 1893	Graduate	Des Moines	Sionx City.	
5467	Wohlgenuth, J. G.	August 1, 1893	"	Burlington	Iowa City.	
5468	Wilson, J. M.	August 1, 1893	"	Council Bluffs	Nebraska.	
5469	Wirtz, J. A.	August 1, 1893	By examination	Le Mars	Britt.	
5470	Wernli, L. S.	June 5, 1893	Graduate	Des Moines	St. Louis, Mo.	
5471	Wood, Rupert Vincent.	September 5, 1893	By examination	Keokuk	Illinois.	
5472	Williams, N. Emery	September 5, 1893	By examination	Ottumwa	Cartersville.	
5473	Walker, Charles C.	September 5, 1893	"	Marathon		
5474	Wagner, J. A.	September 5, 1893	"	St. Dodge		
5475	Welch, W. Richard.	November 9, 1893	Graduate	Germania	Chicago, Ill.	
5476	Waud, Thomas S., Jr.	January 2, 1900	By examination	Charles City		
5477	Walters, Raymond G.	January 2, 1900	By examination	Des Moines		
5478	Williams, William H.	January 2, 1900	"	Des Moines		
5479	Wheeler, Harry A.	February 6, 1900	Graduate	Moorhead.		
5480	Wick, Ruell D.	February 6, 1900	By examination	Bode		
5481	West, A. A.	February 6, 1900	By examination	Cambridge		
5482	Watson, E. L.	March 6, 1900	"	Pioneer		
5483	Wiese, William H.	March 6, 1900	"	Anita		
5484	Wilson, A. W.	April 3, 1900	"	Avoca		
5485	Whitmore, George C.	April 3, 1900	"	Bellevue		
5486	Wendt, Charles C.	April 1, 1900	Graduate	Diagonal		
5487	Week, J. J.	May 1, 1900	"	Milford		
5488	White, M. P.	May 1, 1900	"	Dubuque		
5489	Wise, Harley Louis	May 1, 1900	"			
5490	Wright, Elmer E.	May 1, 1900	"			
6017						

6026	Williams, J. A.	May	1, 1900	By examination	Bloomfield.	Runnels.	In Oklahoma.
6048	Winfrey, F. M.	June	5, 1900	"	Granger	Hampton.	In Colorado.
6071	Wiley, C. H.	July	10, 1900	"	Des Moines	Des Moines.	In Missouri.
6084	Williamson, Harry V.	August	7, 1900	Graduate	Des Moines	Clear Lake	
6090	Woodward, L. W.	August	7, 1900	By examination	Mason City	Thurman.	
6106	White, Mark	August	8, 1900	Graduate	Valley Junction.	Mapleton.	
6118	Woodcock, George C.	September	8, 1900	"	Des Moines	Mechanicville.	
6178	Wilson, Nathan B.	November	4, 1900	By examination	Tipton	Piaseh.	
6196	Wilson, E. E.	December	4, 1900	"	Des Moines	Chicago, Ill.	
6202	Wallick, C. N.	December	5, 1901	Graduate	Council Bluffs	Woolstock	
6219	Willan, L.	February	5, 1901	"	Des Moines	Clarion	
6282	Warren, Otis W.	May	6, 1901	"	Des Moines	Des Moines.	In Nebraska.
6381	Wallace, T. J.	August	6, 1901	"	Des Moines	Irwin.	
6339	Wekesser, H. P.	August	8, 1901	By examination	Waterloo	Waterloo	In Illinois.
6459	Watters, S. H.	September	3, 1901	Graduate	Council Bluffs	Council Bluffs	In Michigan.
6446	Winsett, C. V.	September	1, 1901	"	Des Moines	Des Moines.	In Washington.
6450	Wagar, H. A.	September	1, 1901	Graduate	Des Moines	Des Moines.	In Oklahoma.
6454	Wood, O. R.	September	1, 1901	"	Des Moines	North English.	
6473	Williams, L. W.	November	7, 1901	"	Des Moines	Gowrie.	In Utah.
6486	Wagner, Jas. A.	December	3, 1901	"	Mitchellville		
6496	Wilson, S. G.	January	6, 1902	By examination	Paton		
6488	Wise, Chas.	January	7, 1902	"	Knoxville.		
6451	Wright, Ed. F.	February	4, 1902	"	Okaaloosa	Menlo.	
6571	Williamson, A. J.	February	4, 1902	"	Webster City.	Albert City.	
6581	Whiteman, H. E.	March	4, 1902	"	Gowrie	Kiron.	
6585	Werner, C. A.	March	4, 1902	Graduate	Aplington.		
6589	Warford, D. M.	March	4, 1902	By examination	Schleswig		
6680	Walters, C. O.	April	1, 1902	"	Des Moines		
6646	Wiggins, H. F.	April	1, 1902	Graduate	Ointon.		
6653	Williams, H. L.	April	22, 1902	"	Ackley	Varina.	
6658	Welland, Will	May	6, 1902	By examination	Des Moines.		Colorado.
6659	Wales, Fred E.	May	6, 1902	"	Des Moines.		
6696	Wallick, B. S.	June	3, 1902	Graduate	Mitchellville	Nebraska	Illinois.
6788	Wilson, R. O.	August	3, 1902	"	Des Moines.	Missouri Valley.	Minnesota.
6789	Weeks, W. H.	August	5, 1902	"	Atlantic		Oklahoma.
6790	Wyckoff, G. O.	August	5, 1902	"	Des Moines.		S. Dakota.
6791	Wolfe, H. E.	August	5, 1902	"	Sioux City.		
6792	Wettergreen, G.	August	5, 1902	By examination	Whiting.	Mt. Ayr.	
6811	Watson, W. S.	August	21, 1902	Graduate	Kellerton	Indiana	
6824	Wilhelm, J. G.	August	7, 1902	"	Des Moines.		
6853	Witherell, Pearl	October	7, 1902	"	Davenport.		
6854	Weber, J. S.	October	7, 1902	"	Des Moines.	Foster.	Illinois.
6863	Winger, B. J.	October	7, 1902	"	Avery		
6865	Williams, L. T.	October	7, 1902	"	Davenport.	Minnesota.	
6869	Worley, G. W.	October	17, 1902	By examination	Missouri Valley		
6890	Wellehan, Mary M.	September	18, 1902	Graduate	Hampton.		
6894	Wingate, C. S.	November	8, 1902	By examination	Webbourne.		
6911	Wallace, J. J.	December	8, 1902	"	Columbus Junction.		
6900	Watts, J. C.	January	8, 1903	"			
6901	Wilcox, F. O.	February	8, 1903	"			

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
6932	Willey, Frank.	February	By examination.	Columbus Junction.	Chariton.	
6933	Weston, N. T.	February	"	Colfax.	"	Montana.
6972	Wicks, J. H.	March	Graduate	Des Moines.	"	Illinois.
7008	Wertz, O. S.	April	"	Des Moines.	"	Arkansas.
7039	Wilson, W. F.	April	"	Des Moines.	"	
7045	Williams, Lester.	June	By examination	Rockwell City.	Somers.	
7046	Walsh, Mary G.	June	"	Des Moines.	Davenport.	
7074	Webbles, W. F.	July	Graduate	Iowa City.	"	
7075	Woolley, Ida M.	July	"	Keokuk.	"	
7091	Wood, G. R.	July	"	Dubuque	Ontario.	
7092	Wood, John	July	"	Des Moines.	Illinois.	
7093	Wolker, C. J.	July	By examination	Hamburg.	Illinois.	
7094	Wilker, C. J.	July	"	Stout City.	Farragut.	
7101	Wilson, Orin B.	July	"	Panama.	Percival.	
7104	Wingert, C. H.	August	Graduate	Keosauqua.	Galva.	
7134	Whitten, C. H.	August	"	Connell Bluffs.	Wisconsin.	
7136	Whitron, George A.	August	"	Des Moines.	Pennsylvania.	
7187	Whitinger, F.	August	"	Des Moines.	Wisconsin.	
7189	Whitaker, H. A.	August	"	Met-halltown.	"	
7194	Wicks, H. L.	October	"	Keokuk.	"	
7211	Wicks, H. L.	October	By examination	Des Moines.	"	
7214	Wilson, L. E.	October	"	Lake City.	"	
7227	Whitby, C. M.	November	Graduate	Dubuque.	"	
7238	Wade, W. B.	November	"	Woodward.	"	
7264	Whitely, F. H.	November	"	Keokuk.	Nebraska.	
7280	Walker, P. D. G.	November	"	Des Moines.	"	
7331	Wray, F. P.	February	"	Sully.	Indiana.	
7338	Walker, Louie	February	"	West Liberty	Colorado.	
7339	Walt, R. S.	February	"	Des Moines.	Greenfield.	
7357	Webb, J. M.	April	"	Clearfield	"	
7358	Welch, Geo. H. Jr.	April	By examination	Boone.	Missouri.	
7369	Wolfe, Ralph H.	April	Graduate	Keokuk.	"	
7397	Walker, H. L.	May	"	Keokuk.	"	
7399	Warner, E. A.	May	"	Des Moines.	Missouri.	
7411	Watts, D. T.	June	By examination	Iowa City.	"	
7424	Whetstone, R. B.	July	Graduate	Des Moines.	Charles City.	
7441	Wheeler, C. D.	July	"	"	"	

7488	Wolaver, F. S.	August	2, 1904	By examination	Des Moines.	Colorado.
7489	Woodburn, O. W.	August	2, 1904	Graduate	Cincinnati.	Washington.
7490	Wallace, R. M.	October	4, 1904	"	Burt.	
7517	Winnet, E. B.	October	4, 1904	"	Des Moines.	
7518	Worley, W. H.	December	6, 1904	By examination	Nodaway.	Nebraska.
7557	Warrington, W. B.	February	7, 1905	Graduate	Sioux City.	Eldon.
7577	Weaver, Claude.	February	7, 1905	By examination	Des Moines.	
7586	Wilson, H. B.	February	7, 1905	Graduate	Boone.	
7602	Wilbren, C. L.	April	22, 1905	Graduate	Sibley.	
7611	Walker, D. A.	April	22, 1905	"	Keokuk.	
7644	Whiting, N. D.	June	6, 1905	"	Iowa City.	California.
7648	Woods, P. B.	June	6, 1905	By examination	Cincinnati.	
7668	Whitlock, G. A.	June	19, 1905	"	Des Moines.	Indiana.
7669	Workman, Ellsworth.	June	19, 1905	Graduate	Clarence.	Kanawha.
7670	Wilson, Clyde P.	June	19, 1905	"	Des Moines.	Oseola.
7671	Watts, T. McCoy	June	19, 1905	"	Hedrick.	
7681	Wormley, F. H.	July	12, 1905	"	Cedar Rapids.	Indiana.
7688	Walz, C. A.	July	12, 1905	"	Sioux City.	Illinois.
7697	Weisenburger, V. D.	July	12, 1905	"	Des Moines.	Ohio.
7718	Wilson, Raymond	August	1, 1905	"	Afton.	
7739	Waldhart, W. H.	August	1, 1905	"	Burlington.	
855	Young, E. F.	June	4, 1890	As owner	Manson.	
2968	Yockey, C. C.	November	15, 1898	By examination	Danbury.	Correctionville.
2982	Yocum, A. L.	January	19, 1896	"	Newburn.	Chariton.
4002	Yates, E. T.	March	3, 1891	"	Andubon.	Omaha.
4086	Young, E. M.	March	24, 1891	"	Beaman.	
4182	Young, Charles O.	February	16, 1893	"	Maquoketa.	
4767	Young, John.	November	7, 1894	"	Sioux City.	Connell Bluffs.
4832	Young, E. M.	March	5, 1895	"	Shellsburg.	Cedar Rapids.
4858	Yager, Charles W.	April	2, 1894	"	Calmar.	Rockford.
5410	Young, L. H.	March	1, 1898	"	Leon.	
6081	Yocman, J. Victor.	August	7, 1900	Graduate	Des Moines.	Colorado.
6294	Young, C. W.	March	6, 1901	By examination	Manson.	Albert City.
6295	Young, C. B.	April	2, 1901	"	Oelwein.	Marshalltown.
6353	York, T. E.	July	2, 1901	"	Bloomfield.	
6793	Young, Charles R.	August	5, 1902	Graduate	Des Moines.	Mt. Ayr.
7028	Yocman, E.	June	2, 1903	"	Des Moines.	Nebraska.
7185	Yocum, W. W.	October	6, 1903	"	Springfield.	LaPorte.
7249	Yerian, Clyde E.	December	1, 1903	By examination	Davenport.	Indiana.
7319	Young, J. B.	February	2, 1904	Graduate	Knoxville.	
7793	Young, R. R.	August	1, 1905	Graduate	Des Moines.	
1647	Zelig, Charles A.	August	23, 18-0	As owner	Moscow.	In Illinois.
4425	Zelger, H. L.	March	28, 1893	By examination	Eagle Grove.	
5464	Zinser, E. W.	April	3, 1898	Graduate	Sioux Rapids.	
6178	Zilling, J. A. J.	July	6, 1899	Graduate	Dubuque.	
6190	Zimmerman, Chas. F.	September	9, 1900	By examination	Cedar Rapids.	Garner.
6355	Zelger, Frank V.	July	1, 1901	"	Buffalo Center.	
6441	Zimmerman, J. J.	October	1, 1901	Graduate	Chapin.	
6319	Zak, J. J.	January	6, 1902	By examination	Focaltonas.	In Illinois.
6640	Zimmerman, W. J.	April	1, 1902	"	Gowrie.	Liscomb.

Nebraska.  
Wisconsin.

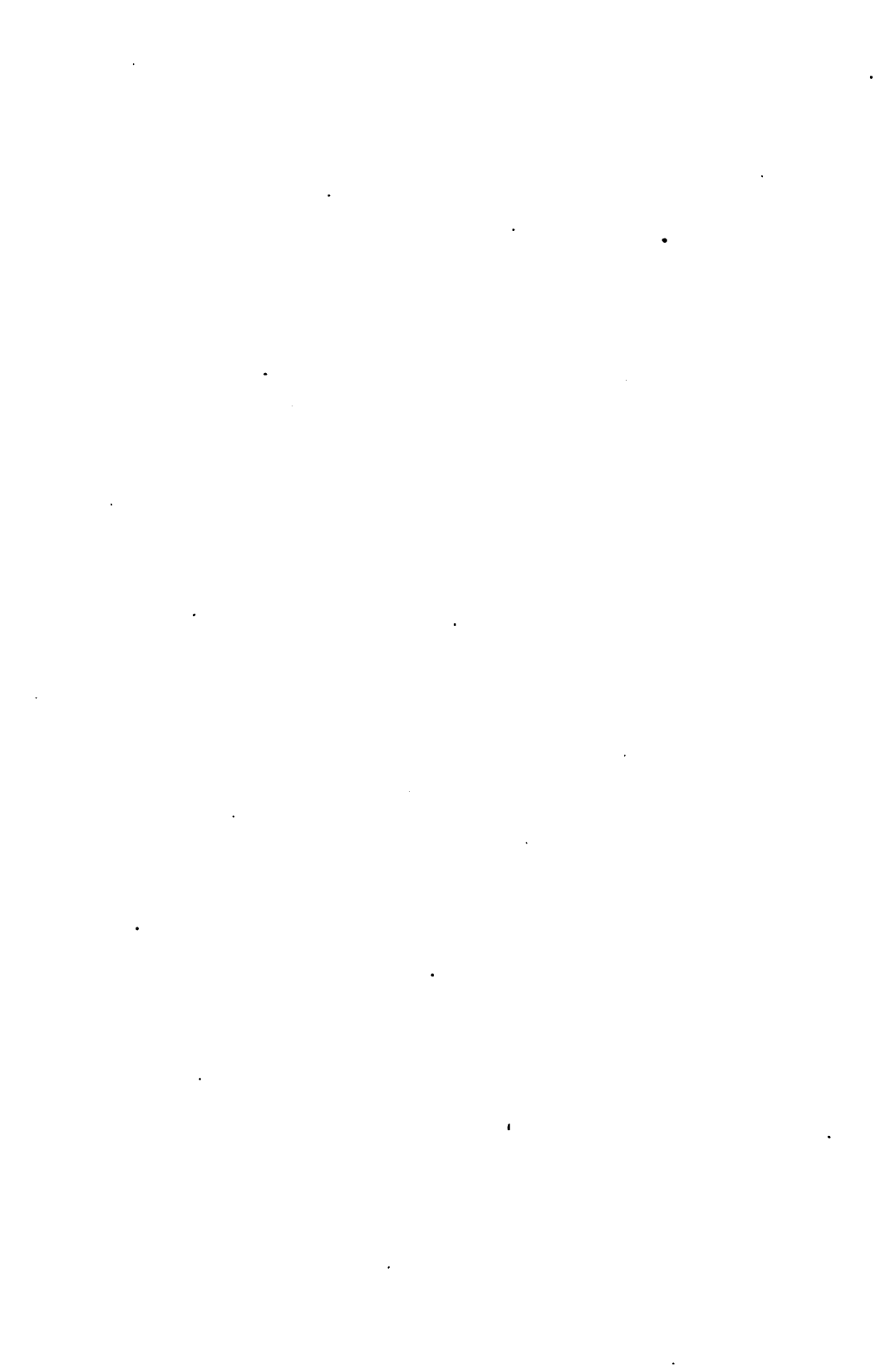
Colorado.

In Illinois.

In Illinois.

## ABSTRACT—CONTINUED.

Number of certificate.	Name.	Date of Registration.	How Registered.	Place of Registration.	Latest Reported Address.	Remarks.
7066	Zimmerman, C. J.	July 1, 1903	Graduate	Van Horne.		
7153	Zieprecht, Carl W.	August 4, 1903	"	Dubuque.		
7183	Zender, M. J.	October 6, 1903	"	Earling.	Mapleton.	
7263	Zwanziger, J. W.	December 1, 1903	By examination	Frederika.	Colo.	
7450	Zimmerman, Julius.	November 12, 1904	"	Hampton		
7341	Zimmerman, G. F.	December 6, 1904	Graduate	Cedar Rapids.		In Nebraska.
7072	Zimmerman, Floyd V.	June 19, 1905	"	Waterloo.		In Indiana.





RULES AND STANDING  
COMMITTEES

OF THE

Thirty-first General Assembly

1906

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY

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DES MOINES  
BERNARD MURPHY, STATE PRINTER.  
1906



# SENATE RULES.

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## REGULAR ORDER OF DAILY BUSINESS.

The following order shall govern:

1. Presentation of petitions or memorials, addressed to the Senate or the General Assembly.
2. Introduction of bills.
3. Resolutions.
4. Communications on the President's table including House messages.
5. Reports of standing committees, in the order in which they stand in the rules, except the committee on Engrossed and Enrolled Bills, Rules and Printing.
6. Reports of select committees.
7. Third reading of bills.
8. Unfinished business before the Senate.
9. Bills and other matters.
10. General order of the day.

## STANDING RULES.

1. The President shall take the Chair at the hour to which the Senate is adjourned, and call the Senate to order; and if a quorum be present, he shall proceed with the regular order of daily business, unless otherwise ordered by the Senate, or unless a special order for the day shall interfere therewith. He shall preserve order and decorum, and decide all questions of order, subject to an appeal to the Senate. He shall appoint all committees, unless otherwise especially ordered. Immediately preceding the adjournment of each morning session; or, in case it cannot be done during that session, then as soon after the convening of the next following session as he may find most convenient, the President shall call for corrections of the Journal

of the last day's proceedings. He shall then cause any mistakes therein to be corrected by the Secretary, and the Journal shall then be approved.

2. The Senate shall, at its pleasure, elect a President pro tem. who shall hold his office during the remaining portion of the time for which the President was elected; and when the President shall from any cause be absent, the President pro tem shall preside, except when the Chair is filled by appointment by the President.

3. There shall be appointed by the Lieutenant Governor, at each session of the Senate, to hold their positions during such session, but subject to be discharged by the President of the Senate for inefficiency or misbehavior, or other reasons in his judgment justifying such discharge, six messengers for the Senate. And the President may appoint other messengers in the place of any discharged.

4. One-fourth of the members may have a call of the Senate, and absent members sent for and their attendance enforced.

5. When a member is about to speak in debate, or deliver any matter to the Senate, he shall rise from his seat and respectfully address himself to "Mr. President," and shall confine himself to the question under debate, avoid personalities, and the imputation of improper motives.

6. When the vote is taken viva voce, questions shall be distinctly put in this form, viz: "As many as are of the opinion (as the case may be) say 'aye.' " And after the affirmative voice is expressed: "As many as are of the contrary opinion say 'no.' " If the President doubt, or a division be called for, the Senate shall divide—those in the affirmative of the question shall first rise from their seats, and afterwards those in the negative.

7. Every member present when a question is put shall vote, unless he shall, for special cause, be excused by a vote of the Senate; but no member shall vote on any question in the event of which he is directly and personally interested, or, except by consent of the Senate in any case where he was not present when his name was called in the taking of the vote. Provided, that any member who was absent by leave of the Senate may vote at any time before the result is announced.

8. All motions (except to adjourn, postpone, or commit,) shall be reduced to writing, if required by any member of the Senate. Any motion or resolution may be withdrawn by the

mover, provided, the same has not been amended by the Senate, and that no amendment is pending thereto.

9. When a question is under debate no motion shall be received but to adjourn, to lay on the table, for the previous question, to postpone to a day certain, to commit or amend, to postpone indefinitely, which several motions shall have precedence in the order in which they are named; and no motion to postpone to a day certain, to commit or postpone indefinitely, being decided, shall be again allowed on the same day, and at the same stage of the bill or proposition. A motion to strike out the enacting clause of a bill shall have the precedence of a motion to amend; and, if carried, shall be considered equivalent to the rejection of the bill.

10. A motion to adjourn, to lay on the table, and for the previous question, shall be decided without debate, and all incidental questions of order rising after a motion is made for the previous question, and pending such motion, shall be decided—whether an appeal or otherwise—without debate.

11. The previous question shall be in this form: "Shall the main question be now put?" It shall only be admitted when demanded by a majority of the members present, and its effect shall be to put an end to all debate, and bring the Senate to a direct vote upon pending amendments and then upon the main question unless otherwise indicated by the motion and ordered by the Senate, except that the member in charge of the measure under consideration shall have ten minutes in which to close the discussion, immediately before the vote is taken upon the main question. If the previous question is decided in the negative, the Senate shall proceed with the matter before it, the same as though the previous question had not been moved.

12. Any member may call for a division of a question, which shall be divided, if it comprehends propositions in substance so distinct that one being taken away substantive propositions shall remain for the decision of the Senate. A motion to strike out and insert shall be deemed indivisible; but a motion to strike out being lost, shall preclude neither amendments to the matter attempted to be stricken out, nor a motion to strike out and insert.

13. When a motion or question has been decided, any member having voted on the prevailing side, may move a reconsideration, on the same or next legislative day.

14. A motion to print any paper presented to the Senate may, on motion, be referred to the Committee on Printing, whose duty it shall be to report at the earliest time practicable, on the propriety of printing.

15. Every bill shall be introduced on the report of a committee, or by leave, and shall at once be given its first reading. Every bill and joint resolution shall have received three several readings previous to its passage; but no bill or joint resolution shall have its second and third readings on the same day, without a suspension of this rule; and every bill and joint resolution shall express in its title the object thereof. All rules of the Senate applicable to bills shall apply with equal force to joint resolutions. Each bill and proposed joint resolution, when introduced, shall be accompanied by a copy thereof, which shall be delivered, instead of the original, to the State Printer by the Secretary of the Senate.

16. Before the same is presented, there shall be endorsed on each petition a brief statement of the subject matter thereof, and on each bill and joint resolution the title thereof, and in either case the name of the Senator presenting the same. In presenting a petition, the Senator shall briefly state from his place in the Senate Chamber the subject matter to which the petition relates.

17. The first reading of a bill or joint resolution shall be for information, and, if objection be made to it, the question shall be, "Shall the bill (or joint resolution, as the case may be) be rejected?" If no objection be made, or the question to reject be lost, the bill or joint resolution shall go to its second reading without further questioning.

18. Upon the second reading of a bill or joint resolution, the President shall state it as ready for commitment, amendment or engrossment, and if committed, then the question shall be, whether to a select or standing committee, or a committee of the whole. If to a committee of the whole, the Senate shall determine on what day. If no objection is made, the President of the Senate may refer the bill or joint resolution to an appropriate committee or to such committee as the Senator who introduces the measure shall suggest. But if the bill or joint resolution be ordered to be engrossed, it shall be in order for its third reading any session after that day. No bill or joint resolution shall be committed or amended until it shall have been twice read.

19. (a) All bills carrying appropriations shall be referred to the Committee on Appropriations, which the Committee shall report back to the Senate not later than the first Monday after March 15. After the third legislative day prior to said Monday, House bills shall be reported back by said Committee within three days from the reference thereof.

(b) No bill carrying an appropriation shall be introduced after March 15 except by the Committee on Appropriations.

(c) On or before the first Monday after March 15, the Committee on Appropriations shall prepare an itemized schedule of all appropriations recommended by the Committee on Appropriations and have the same printed and laid upon the desks of members and no appropriation bill shall be taken up for consideration and passage until the third legislative day thereafter.

(d) All appropriation bills after being reported by the Committee on Appropriations shall first be considered by the Senate as in Committee of the Whole, President of the Senate presiding, after which they shall be reported to the Senate; and any amendments made in Committee of the Whole shall again be considered by the Senate after which further amendments may be proposed. While thus in Committee of the Whole, heads of departments for institutions and members of any board or commission or subordinates of the same may be summoned to appear and give information relative to their appropriations.

20. When a question is lost on engrossing a bill, or joint resolution for a third reading on a particular day, it shall not preclude a question to engross it for a third reading on a different day. After a third reading of a bill or a joint resolution, no amendment (except to fill blanks) shall be received except, by unanimous consent of the members present; and the vote on its final passage shall be immediately taken without debate.

21. A bill or joint resolution may be committed at any time previous to its third reading.

22. In filling blanks, the largest sum and longest time shall be first put.

23. On the return of a bill or joint resolution from the House, with an amendment, it shall be placed with the third reading of bills, unless the Senate shall otherwise order. On the question of adopting the amendment the vote shall be taken on the final passage of the bill, and if the amendment be adopted by a constitutional majority, no further vote is necessary.

24. All bills and joint resolutions introduced, except local or legalizing bills, shall be printed, unless otherwise ordered by the Senate, and committees may order to be printed any bills under consideration by them, and any substitutes for bills or resolutions reported by them.

25. It shall be in order for the Committee on Engrossed and Enrolled Bills, on Rules and on Printing, to report at any time, when no member is addressing the Senate.

26. When any special order of the day is not proceeded with on the day assigned, it shall stand as a general order on each succeeding day until disposed of, unless otherwise ordered, but its consideration cannot be moved until that order of business is reached, when it shall be taken up in order of its file, and shall be taken up in the order of precedence.

27. When the pending question is interrupted by a "Special Order," it shall, upon the disposal of the special order, be before the Senate in the same stage as if it had not been so interrupted.

28. Committees are permitted to employ clerks by the majority vote of the whole committee. The clerk shall be selected by such vote, and in like manner may be discharged for inefficiency, or when the services of the clerk become unnecessary.

29. Clerks of Senate committees, when not engaged in duties pertaining to such committees, or work assigned them by the committee chairman, shall be subject to the discretion of the Secretary of the Senate, for any labor connected with the duties of his position or his assistants. The Secretary shall, from time to time, make detail from said clerks to assist in preparing copy or correcting proof for the daily Journal.

30. All reports of committees on bills or resolutions shall be made in duplicate and be accompanied with the original bill or resolution to which the report relates: Providing that this rule shall not apply to the reports of committees on Enrolled and Engrossed Bills.

31. When a vote is taken in any committee upon any bill or resolution before it, or any motion relating to the merits thereof, the chairman shall see that no person is present except the members and clerk of said committee, unless otherwise ordered by the committee.

32. Smoking in the Senate Chamber is hereby prohibited while the Senate is in session. And any officer or employee who shall indulge in smoking while on duty in the Senate Chamber

or doorways leading thereto, shall thereby subject himself to liability of discharge.

33. Admission to the floor of the Senate Chamber shall be granted by the Doorkeeper to the Governor and his private secretary, members of the House of Representatives, the state officers and their deputies, judges of the several courts, ex-members of the Legislature, ex-state officers and the regular reporters of the Senate and clerks of committees. No persons, except those herein specified, shall be admitted, except upon special permission of the President of the Senate, or of a member of the Senate. And no person shall be permitted by members or otherwise to come upon the floor of the Senate or into the cloak rooms to solicit or influence Senators in their official action, or to sell any article or to solicit subscriptions. No officer, or employee elected or appointed by the Senate or any of its committees, shall solicit or endeavor to influence members of the Legislature, in their official action. Any person violating this rule shall be summarily dismissed by the Senate.

34. In case of disturbance or disorderly conduct in the lobby or gallery the presiding officer shall have the power to order the same cleared.

35. Before acting on executive business, the Senate Chamber shall be cleared, by direction of the President, of all persons except members, the Secretary, the Sergeant-at arms, members enjoined and the Secretary and Sergeant-at-Arms sworn, to observe secrecy.

36. When an adjournment has been ordered by a vote of the Senate, and before adjournment is declared by the President of the Senate, it shall be in order for the chairmen of the several committees to announce in open Senate the time and place of meeting of their respective committees.

37. No standing rule or order of the Senate shall be rescinded or suspended, nor shall any matter, tabled upon motion, be taken up, unless by a vote of two-thirds of the members present, except an order fixing the hour to which the Senate shall stand adjourned.

38. Resolutions, including concurrent resolutions, shall not be acted upon by the Senate upon the day the same are introduced or received by the Senate, but shall lie upon the table for one legislative day if any member object to the immediate consideration thereof. But if no member object, the same may

have immediate consideration. Nothing in this rule shall abridge or prevent the usual right of reference to committee.

39. The rules of parliamentary practice comprised in Cushing's Manual shall govern the Senate in all cases to which they are applicable, and in which they are not inconsistent with the standing rules or orders of the Senate, and joint rules of the Senate and House of Representatives.

40. The duties of the officers and employees of the Senate are as stated in the paragraphs relating thereto, and appended to these rules.

The Secretary of the Senate shall have charge of the Secretary's desk, and shall see that no one is permitted therein except himself and those assisting him. He shall be responsible for the custody and safe-keeping of all bills, resolutions and other matters laid before or introduced into the Senate, except while the same are in the possession of the committee to whom the same shall have been referred, and when delivering the same to said committee he shall take a proper receipt therefor. He shall see that the Journal of each day's proceedings is correctly and fully kept, and fully made up before the next day's session, and be responsible for its safe-keeping. He shall have control of Room 25, which is assigned to said Secretary for the use of himself and his assistants. He shall endorse on every bill or joint or concurrent resolution, the date of its introduction and by what Senator, or of its receipt from the House, and also what action relating thereto is taken by the Senate. The Assistant Secretaries shall be under his direction, and he shall assign to them their several duties in connection with the duties of the Secretary's desk.

The Sergeant-at-Arms shall wear the appropriate badge of his office; shall attend the Senate during its sessions; shall aid in the enforcement of order under the direction of the President of the Senate; shall execute the commands of the Senate from time to time, together with such process, issued by the authority thereof, as shall be directed to him by the presiding officers; shall see that the rule prohibiting smoking in the Senate Chamber is strictly enforced; shall, upon the request of any five members, have the Senate Chamber lighted up during any evening within the session, except Sunday, to an hour not later than 10 P.M.; shall see that no person, except one authorized to do so, disturbs or interferes with desks of the members, or with the books, papers, etc., thereat; shall see that the printed bills and daily

Journals are, at the earliest practicable period, properly distributed and filed upon the desks of Senators; shall have charge of the files in the Senate bill room, and shall see that no copy of bill is given out except to or upon the order of the President, a Senator or state officers; shall see that an additional doorkeeper is detailed for duty at the Senate Chamber upon each day within the session, except Sunday from 8:30 A. M. to 10 P. M., but should not five members of the Senate desire to occupy the Chamber to that hour, the detail may be relieved at 9 P. M.; shall have charge of the messengers of the Senate and see that they severally perform their duties, and shall promptly report to the President of the Senate any inefficiency or violations of duty on the part of said messengers. He shall direct the File Clerk, a d Bill Clerk, if any employed, in the discharge of their duties.

The Doorkeeper of the Senate shall wear his appropriate badge of office; shall have special charge of the main door of the Chamber during the sittings of the Senate, and shall see that the other doors of the Senate are properly attended to; shall have general charge and oversight of the additional doorkeepers of the Senate; shall detail such of the additional doorkeepers for such general or special duties as the Sergeant-at-Arms may deem proper and necessary for the efficiency of the Senate and the protection of property within the Chamber; shall see that the rule relating to the admission to the floor of the Chamber is strictly enforced; shall, ten minutes before the opening of each session of the Senate, see that the floor is cleared of all persons not entitled to occupy the same during the session; shall attend to seating visitors, and shall announce all committees and messengers from the Governor or House.

The Janitor of the Senate shall have charge, under the direction of the Sergeant-at-Arms, of the cloak and retiring rooms adjoining the Chamber, and shall see that the same are kept in proper order.

The messengers of the Senate shall attend the Senate during its sittings and perform the duties generally devolving on like employees. While the Senate is sitting, two of their number shall be detailed for service in front of the Secretary's desk. The messengers shall be under the direction of the Sergeant-at-Arms, while the Senate is not sitting, and shall attend to such duties as he may assign them.

At least four messengers shall be on duty in the Senate Chamber upon every day of the session except Sundays, from 8:30 A. M. until 6 P. M., whether the Senate is in session or not.

## SENATORS

Distric.	NAME	P. O. ADDRESS	COUNTIES IN DISTRICT	OCCUPATION	NATIVITY	Years in Iowa	Age
46	Bleakly, John L. . .	Ida Grove . . .	Cherokee, Ida, Plymouth . . .	Ret Merchant . . .	Ireland . . . . .	33	49
12	Brooks, John T. * .	Hedrick . . . . .	Keokuk, Powe hick . . . . .	Banker . . . . .	Iowa . . . . .	55	55
18	Bruce, James E. * .	Atlantic . . . . .	Cass, Shelby . . . . .	Atty & Bnkr . . .	Iowa . . . . .	45	45
38	Courtright, O. B. * .	Waterloo . . . . .	Black Hawk, Grundy . . . . .	Lawyer . . . . .	Illinois . . . . .	46	55
35	Crawford, P. W. * .	Dubuque . . . . .	Dubuque . . . . .	Lawyer . . . . .	Vermont . . . . .	66	74
16	Crossley, J. J. . . .	Winterset . . . . .	Adair, Madison . . . . .	Lawyer . . . . .	Iowa . . . . .	36	36
30	Dowell, Cassius C. * .	Des Moines . . . . .	Polk . . . . .	Lawyer . . . . .	Iowa . . . . .	41	41
33	Dunham, Geo. W. . .	Manchester . . . . .	Buchanan, Delaware . . . . .	Attorney . . . . .	Iowa . . . . .	46	47
28	Eckles, Charles . . .	Marshallto'n . . . . .	Marshall . . . . .	Ret Farmer . . . .	England . . . . .	40	65
2	Elerick, James . . . .	Douds Stat'n . . . . .	Jefferson, Van Buren . . . . .	Frmr & Stock . . . .	Ohio . . . . .	52	66
31	Ericson, C. J. A. . .	Boone . . . . .	Boone, Story . . . . .	Banker . . . . .	Sweden . . . . .	47	65
43	Gale, A. H. . . . .	Mason City . . . . .	Cerro Gordo, Franklin, Hancock . . . . .	Banker . . . . .	Iowa . . . . .	42	42
48	Garst, Warren * . .	Coon Rapids . . . . .	Carroll, Greene, Sac . . . . .	Merchant . . . . .	Ohio . . . . .	40	54
8	Gilliland, Shirley . .	Glenwood . . . . .	Mills, Montgomery . . . . .	Lawyer . . . . .	Iowa . . . . .	49	49
13	Harper, Sam'l H. * .	Ottumwa . . . . .	Wapello . . . . .	Wh. Hdware . . . .	Ohio . . . . .	52	62
37	Harshora, F. C. * .	Clarion . . . . .	Hamilton, Hardin, Wright . . . . .	Bnkr. Rl Est . . . .	Iowa . . . . .	48	48
4	Hasselquist, R. A. . .	Chariton . . . . .	Lucas, Wayne . . . . .	Merchant . . . . .	Sweden . . . . .	36	55
21	Hayward, W. C. * . .	Davenport . . . . .	Scott . . . . .	Manufact'rer . . . .	New York . . . . .	41	58
34	Hogue, Ernest L. * .	Blencoe . . . . .	Crawford, Harrison, Monona . . . . .	Farmer . . . . .	Iowa . . . . .	43	43
17	Hopkins, Frank M . .	Guthrie Cntr . . . . .	Audubon, Dallas, Guthrie . . . . .	Banker . . . . .	Iowa . . . . .	51	51
25	Hughes, John Jr. . .	Williamsb'rg . . . . .	Iowa, Johnson . . . . .	Lumber Dir . . . . .	Ohio . . . . .	49	64
32	Jackson, John H. . .	Sioux City . . . . .	Woodbury . . . . .	Lawyer . . . . .	Wisconsin . . . . .	21	42
11	Jamison, James H. .	Oskola . . . . .	Clarke, Warren . . . . .	Attorney . . . . .	Iowa . . . . .	44	44
14	Jones, Wm. G . . . .	Oskaloosa . . . . .	Mahaska . . . . .	Lawyer . . . . .	Iowa . . . . .	44	44
49	Kimmel, Wm. C. . . .	Sheldon . . . . .	Lyon, O'Brien, Osceola, Sioux Clay, Dickinson, Emmet, Kosuth, Palo Alto . . . . .	Frmr & Stock . . . .	Pennsylvania . . . .	22	51
47	Kinne, George . . . .	Curlew . . . . .	Jackson . . . . .	Farmer . . . . .	Wisconsin . . . . .	24	44
23	Lambert, Thomas. * .	Sabula . . . . .	Fremont, Page . . . . .	Publisher . . . . .	Iowa . . . . .	50	50
7	Lewis, Lester W. . . .	Clatinda . . . . .		Banker . . . . .	Illinois . . . . .	24	45

42	Lyons, D. A.*	Cresco	Howard, Winneshiek	Implt Dealer	Illinois	37	52
29	Maytag, Fred L.*	Newton	Jasper	Manufacturer	Illinois	36	46
20	Molberg, F. M.*	Columb's Jct	Louisa, Muscatine	Lawyer	Iowa	37	37
36	Newberry, Byron W	Straw'ry Pt	Clayton	Lawyer	Ohio	48	50
19	Saunders, Chas. G.	Council Bl'fs	Pottawattamie	Lawyer	New York	35	42
9	Smith, Fred N.*	Burlington	Des Moines	Farmer	Iowa	53	53
41	Smith, James A.	Osage	Mitchell, Winnebago, Worth	Lumberman	New York	34	52
24	Spaulding, E. C.*	Marble Rock	Chickasaw, Floyd	Farmer	New Hampshire	34	65
24	Stirton, Robert C.	Monticello	Cedar, Jones	Banker	Scotland	32	42
5	Stokey, Marion C	Leon	Decatur, Ringgold, Union	Lawyer	Indiana	46	57
26	Stuckslager, W. C.	Lisbon	Linn	Banker	Iowa	34	34
3	Taylor, Lewis L.	Centerville	Appanoose, Davis	Banker	Kentucky	54	60
6	Turner, Daniel W.	Corning	Adams, Taylor	Merchant	Iowa	26	26
39	Wade, John F.	Aredale	Bremer, Butler	Frmr & Bnkr	Vermont	39	44
15	Warren, J. L.	Pella	Marion, Monroe	Lawyer	Iowa	43	43
45	Whipple, Wm. P.	Vinton	Benton, Tama	Lawyer	Iowa	46	46
40	Wilson, A. C.	Oelwein	Allamakee, Fayette	Druggist	Canada	25	45
22	Wilson, John L.*	Almont	Clinton	Farmer and Stock	Iowa	46	46
50	Winne, E. K.*	Humboldt	Buena Vista, Humboldt,				
			Pocahontas				
1	Young, David A.*	Argyle	Lee	Real Estate	Iowa	29	29
27	Young, Henry	Manson	Calhoun, Webster	Farmer and Stock	Illinois	43	51
10	Young, John A.*	Washington	Henry, Washington	Physician	Illinois	31	57
				Banker	Indiana	60	65

\* Elected to full term, 1901.

Republicans in Roman—42. Democrats in Italic—8.

#### ADDITIONAL INFORMATION.

*Former Legislative Service.*—All members of the present senate served during the 30th General Assembly. Those having additional legislative service are as follows:—Brooks, S. 29; Bruce, S. 29; Courtwright, S. 29; Crossley, S. 23, 29; Dowell, H. 25, 53, S. 29; Dunham, H. 23, 29; Eckles, H. 23, 29; Elerick, H. 19; Erickson, H. 14, S. 26, 27, 28, 29; Garst, S. 26, 29, 37, 38, 29; Harper, S. 29; Hartshorn, S. 129; Hasselquist, H. 23, 29; Hayward, S. 27, 23, 29; Hogue, S. 29; Hopkins, S. 26, 29; Hughes, H. 27, 23, 29; Jamison, S. 24, 25; Jones, H. 23, 29; Lambert, H. 23, 29; Lewis, H. 23, 23, S. 24, 25, 29; Lyons, S. 27, 28, 29; Maytag, S. 29; Moleberry, S. 29; Saunders, elected to fill vacancy in S. 29; Smith (Fred N.), elected to fill vacancy in S. 24, 25, 29; Smith (James A.), H. 22, 23, S. 23, 29; Spaulding, H. 24, 25, 29; S. 29; Stuckslager, H. 23, 29; Warren, H. 23, 29; Whipple, S. 29; Wilson (John L.), H. 23, 29, S. 27, 28, 29; Winne, S. 29; Young (D. A.), S. 27, 28, 29; Young (Henry), H. 34, 25; Young (John A.), S. 29.

*Military Service.*—Crawford, 1st Lieut., 2nd Iowa Inf., Captain 4th U. S. Vet. Vol. Inf.; Eckles, Private, Sergeant, 2d Lieut. and Captain Co. D. 34th Ills. Vet. Vol. Inf.; Elerick, Captain Co. A. 59th Ills. Vet. Vol. Inf.; Harper, Corporal Co. B. 86th Iowa Inf.; Captain 46th U. S. C. T.; Hughes, Sergeant Co. G. 23d Iowa Inf.; Stookey, Private Co. C. 47th Iowa Inf.; Turner Corporal Co. K, 1st Iowa Inf.; S. A. W.; Young (John A.), Captain Co. A. 26th Iowa Inf.

*Education.*—Rural School:—Bleakly, Garst, Hogue, Kimmel, Lyons, Maytag, Young, (D. A.)

Common School:—Erickson, Lambert, Smith, (J. A.)

Graded School:—Eckles, Elerick, Taylor, Wade.

High School:—Eckles, Elerick, Hughes, Kinne, Stirton, Wilson, (A. C.)

Business College:—Wilson, (J. L.), Winne.

Academy:—Smith, (F. N.), Spaulding, Turner, Young, (Henry.)

College:—Brooks, Bruce, Courtwright, Crawford, Crossley, Dowell, Dunham, Gale, Gilliland, Harper, Hartshorn, Hayward, Hopkins, Jackson, Jamison, Jones, Lewis, Moleberry, Newberry, Saunders, Stookey, Stuckslager, Warren, Whipple, Young, (John A.) Married, 43.

Singlet: Dowell, Elerick, Gale, Hogue, Jackson, Winne—8. Widower, Erickson—1.

## OFFICERS OF THE SENATE.

Office.	Officer.	Post Office.	County.	Occupation.	Nativity	Age.	Married or Single.	Army Service.	Des Moines Residence.
President.....	John Herriott.....	Stuart.....	Guthrie.....	Druggist.....	Penn.....	59 40	Married	1st. Penn Res Cav.	Savery.
Secretary.....	Geo. A. Newman.....	Cedar Falls.....	Black Hawk.....	Dentist.....	N. Y.....	53 25	Married	Co. G. 6th N. Y. Cav	535 East 14th St.
First Asst. Sec'y.....	Geo. A. Wilson.....	Menlo.....	Adair.....	Student.....	Iowa.....	37 22	Single	.....	784 E Locust St.
Second Asst. Sec'y.....	J. L. Gillespie.....	Nevada.....	Story.....	Lawyer.....	Iowa.....	36 30	Married	.....	East Grand Ave.
Engineering Clerk.....	Leds M. Rigby.....	Davenport.....	Scott.....	Stenographer.....	Iowa.....	34 34	Single	.....	1300 Arlington Ave.
Enrolling Clerk.....	Lies Black.....	Knoxville.....	Marion.....	Stenographer.....	Iowa.....	35 25	Single	.....	1448 East Grand.
Journal Clerk.....	Oecil Dixon.....	Rockwell City.....	Calhoun.....	Merchant.....	Iowa.....	47 31	Married	.....	1648 Twelfth St.
Journal Clerk.....	John Connelly.....	Des Moines.....	Polk.....	Collector.....	Ireland.....	61 55	Married	.....	1040 6th Ave.
Sergeant-at-Arms.....	R. B. Huff.....	Muscatine.....	Muscatine.....	Real Estate.....	Ohio.....	63 38	Married	.....	18th and Center
File Clerk.....	Thos. Brown.....	Elanco.....	Monona.....	Merchant.....	Penn.....	57 36	Single	.....	care of Dr. Maple
Bill Clerk.....	Alice Scott.....	Oceola.....	Clarke.....	Stenographer.....	Illinois.....	53 35	Single	.....	1337 Capital Ave.
Post Mistress.....	Nellie Stevenson.....	Jefferson.....	Greene.....	Hotel keeper.....	Iowa.....	55 00	Married	.....	1335 East Grand.
Doorkeeper.....	A. L. Hammer.....	Kellogg.....	Jasper.....	.....	Tenn.....	55 00	Married	7th Iowa Cav.....	837 West Fifth St.

*Assistant Doorkeepers*—D. W. Sheam, J. H. Carter, W. McFadden, L. D. McAlpine, M. E. Erwin, J. H. Stewart, E. Armstrong, Thos. Hager.

*Janiitors*—Jed Logan, O. S. Erwin, Wm. Thompson.

*Pages*—Ewing Scott, H. Nixon Blunt, Karl N. Ekers, Cleveland Foster, Wm. Welsh, Carroll Bennett, Harry Prad, James Davy.

## STANDING COMMITTEES OF THE SENATE.

## WAYS AND MEANS—24.

Senator Hayward,  
Crossley,  
Lewis,  
Hartshorn,  
Hogue,  
Bruce,  
Whipple,  
Molsberry,

Senator Young of Washington,  
Winne,  
Ericson,  
Hughes,  
Gilliland,  
Gale,  
Lambert,  
Smith of Des Moines.

## JUDICIARY—22.

Senator Dowell,  
Crawford,  
Whipple,  
Courtright,  
Molsberry,  
Bruce,  
Crossley,  
Dunham,

Senator Jamison,  
Warren,  
Gilliland,  
Saunders,  
Stookey,  
Newberry,  
Jones,  
Jackson.

## APPROPRIATIONS—24.

Senator Garst,  
Smith of Mitchell,  
Hopkins,  
Harper,  
Maytag,  
Spaulding,  
Brooks,  
Saunders,

Senator Turner,  
Dunham,  
Young of Calhoun,  
Eckles,  
Stookey,  
Kinne,  
Lyons,  
Wilson of Clinton.

## AGRICULTURE—23.

Senator Brooks,  
Crossley,  
Hopkins,  
Hogue,  
Spaulding,  
Courtright,  
Bruce,  
Ericson,

Senator Eckles,  
Elerick,  
Newberry,  
Hughes,  
Kinne,  
Kimmel,  
Smith of Des Moines,  
Young of Lee.

## RAILROADS—23.

Senator Smith of Mitchell,  
Hopkins,  
Hartshorn,  
Courtright,  
Harper,  
Winne,  
Molsberry,  
Jamison,

Senator Saunders,  
Hasselquist,  
Elerick,  
Gale,  
Jackson,  
Bleakly,  
Smith of Des Moines  
Stirton.

## CITIES AND TOWNS—23.

Senator Courtright,  
Crawford,  
Harper,  
Whipple,  
Hayward,  
Dowell,  
Young of Washington,  
Gilliland,

Senator Stuckslager,  
Jackson,  
Eckles,  
Turner,  
Jones,  
Wilson of Clinton,  
Smith of Des Moines.

## SUPPRESSION OF INTemperance—18.

Senator Dunham,  
Smith of Mitchell,  
Young of Washington,  
Brooks,  
Winne,  
Whipple,  
Ztookey,

Senator Warren,  
Bruce,  
Gale,  
Bleakly,  
Lyons,  
Lambert.

## INSURANCE—28.

Senator Whipple,  
Smith of Mitchell,  
Courtright,  
Maytag,  
Bruce,  
Ericson,

Senator Warren,  
Stuckslager,  
Young of Calhoun,  
Turner,  
Lyons,  
Wade.

## SCHOOLS—28.

Senator Crossley,  
Molsberry,  
Dunham,  
Hopkins,  
Whipple,  
Jamison,

Senator Wilson of Fayette,  
Kinne,  
Warren,  
Wilson of Clinton  
Taylor.

CONGRESSIONAL AND JUDICIAL DISTRICTS—20.

Senator Molsberry, Harper, Dowell, Gilliland, Hasselquist, Wilson of Fayette,	Senator Stuckslager, Young of Calhoun, Jackson, Wade, Stirton.
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SENATORIAL AND REPRESENTATIVE DISTRICTS—17.

Senator Bruce, Winne, Garst, Lewis, Smith of Mitchell, Young of Washington,	Senator Hughes, Hasselquist, Kimmel, Lyons, Young of Lee.
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ELECTIONS—29.

Senator Lewis, Molsberry, Courtright, Crossley, Bruce, Dunham,	Senator Jackson, Gilliland, Kinne, Wilson of Clinton Stirton.
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CONSTITUTIONAL AMENDMENTS AND SUFFRAGE—22.

Senator Jamison, Courtright, Molsberry, Crossley, Newberry, Hartshorn,	Senator Stuckslager, Saunders, Jackson, Stirton, Lambert.
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PUBLIC HEALTH—17.

Senator Young of Calhoun, Spaulding, Hayward, Dowell, Crawford, Young of Washington,	Senator Ericson, Saunders, Wilson of Fayette, Taylor, Stirton.
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PUBLIC LIBRARIES—20.

Senator Ericson, Hopkins, Crossley, Courtright, Garst, Maytag,	Senator Gilliland, Young of Calhoun, Gale, Lambert, Smith of Des Moines.
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## TELEGRAPH AND TELEPHONES—28.

Senator Hopkins, Hayward, Winne, Whipple, Maytag, Brooks,	Senator Stookey, Kimmel, Kinne, Lambert, Wade.
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## CORPORATIONS—18.

Senator Hogue, Whipple, Hasselquist, Ericson, Turner, Gilliland,	Senator Bleakly, Stuckslager, Warren, Stirton, Wade.
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## BANKS—21.

Senator Stuckslager, Young of Washington, Ericson, Hopkins, Brooks,	Senator Lewis, Bruce, Gale, Stirton.
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## MILITARY—18.

Senator Harper, Crawford, Turner, Young of Washington, Hughes,	Senator Elerick, Eckles, Stookey, Wilson of Clinton.
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## LABOR—21.

Senator Winne, Maytag, Smith of Mitchell, Harper, Hughes,	Senator Wilson of Fayette, Elerick, Lyons, Lambert.
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## EDUCATIONAL INSTITUTIONS—21.

Senator Young of Washington, Hogue, Brooks, Hayward, Wilson of Fayette,	Senator Hasselquist, Jamison, Stookey, Taylor.
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## MINES AND MINING—17.

Senator Warren, Ericson, Hasselquist, Maytag, Elerick,	Senator Jamison, Young of Calhoun, Young of Lee, Wade.
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HIGHWAYS—18.

Senator Hasselquist,  
Spaulding,  
Hartshorn,  
Lewis,  
Winne,

Senator Kinne,  
Dunham,  
Young of Lee  
Stirton.

PHARMACY—17.

Senator Wilson of Fayette,  
Hopkins,  
Hayward,  
Garst,  
Saunders,

Senator Molsberry,  
Newberry,  
Lyons,  
Lambert.

PRINTING—29.

Senator Hartshorn,  
Courtright,  
Elerick,  
Bleakly,  
Eckles,

Senator Newberry,  
Stookey,  
Young of Calhoun  
Lambert.

CHARITABLE INSTITUTIONS.

Senator Spaulding,  
Hogue,  
Harper,  
Dunham,  
Jackson,

Senator Kinne,  
Kimmel,  
Lyons,  
Young of Lee.

BUILDING AND LOANS—19.

Senator Jones,  
Crossley,  
Harper,  
Wilson of Fayette,  
Hughes,

Senator Garst,  
Bleakly,  
Taylor,  
Wade.

RULES—24.

Senator Maytag,  
Dowell,  
Hogue,  
Hayward.  
Dunham,

Senator Warren,  
Gale,  
Wilson of Clinton,  
Lambert.

COMPENSATION OF PUBLIC OFFICERS—29.

Senator Jackson,  
Hartshorn,  
Lewis,  
Jamison,

Senator Bleakly,  
Smith of Des Moines,  
Taylor.

PENITENTIARIES AND PARDONS—19.

Senator Saunders,  
Brooks,  
Crawford,  
Smith of Mitchell,

Senator Newberry,  
Stookey,  
Young of Lee.

## FEDERAL RELATIONS—20.

Senator Crawford, Hogue, Hartshorn, Lewis,	1 Young of Lee, Smith of Des Moines.
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## CLAIMS—19.

Senator Eckles, Garst, Spaulding, Crawford,	Senator Lewis, Kimmel, Young of Lee.
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## COMMERCE—16.

Senator Hughes, Harper, Dowell, Hogue,	Senator Elerick, Turner, Taylor.
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## MANUFACTURES—16.

Senator Gale, Maytag, Stuckslager,	Senator Young of Lee, Taylor.
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## PUBLIC BUILDINGS—26.

Senator Stookey, Brooks, Garst,	Senator Jones, Wade.
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## HORTICULTURE AND FORESTRY—16.

Senator Elerick, Spaulding, Jones,	Lyons.
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## FISH AND GAME—20.

Senator Kimmel, Winne, Jones,	Senator Wilson of Clinton, Lambert.
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## PUBLIC LANDS—26.

Senator Bleakly, Hogue,	Senator Wilson of Clinton.
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## ENGROSSED BILLS—26.

Senator Newberry, Jones,	Senator Hartshorn.
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## ENROLLED BILLS—22.

Senator Turner, Winne,	Senator Taylor.
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## SENATORS AND THEIR RESPECTIVE COMMITTEES.

## BLEAKLY.

Public Lands—Chairman, Printing, Building and Loan. Compensation of Public officers,	Corporations, Railroads, Suppression of Intemperance.
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## BROOKS.

Agriculture—Chairman, Appropriations, Public Buildings, Educational Institutions.	Penitentiaries and Pardons, Telegraph and Telephones, Banks, Suppression of Intemperance.
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## BRUCE.

Senatorial and Representative Districts—Chairman, Ways and Means, Judiciary, Elections,	Banks, Agriculture, Suppression of Intemperance, Insurance.
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## COURTRIGHT.

Cities and Towns—Chairman, Judiciary, Printing, Elections, Constitutional Amendments and Suffrage,	Public Libraries, Agriculture, Railroads, Insurance.
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## CRAWFORD.

Federal Relations—Chairman, Judiciary, Claims, Penitentiaries and Pardons,	Public Health, Military, Cities and Towns.
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## CROSSLEY.

Schools—Chairman, Ways and Means, Judiciary, Building and Loan, Elections.	Constitutional Amendments and Suffrage, Public Libraries, Agriculture.
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**DOWELL.**

Judiciary—Chairman,  
Commerce,  
Rules,

Public Health,  
Cities and Towns,  
Congressional and Judicial Districts.

**DUNHAM.**

Suppression of Intemperance—  
Chairman,  
Judiciary,  
Appropriations,  
Highways,

Charitable Institutions,  
Rules,  
Elections,  
Schools,

**ECKLES.**

Claims—Chairman,  
Appropriations,  
Printing,

Military,  
Agriculture,  
Cities and Towns.

**ELERICK.**

Horticulture and Forestry—Chair-  
man,  
Commerce,  
Mines and Mining,  
Printing,

Military,  
Labor,  
Agriculture,  
Railroads.

**ERICSON.**

Public Libraries—Chairman,  
Ways and Means,  
Mines and Mining,  
Corporations,

Banks,  
Agriculture,  
Insurance.

**GALE.**

Manufactures—Chairman,  
Ways and Means,  
Rules,  
Public Libraries,

Banks,  
Railroads,  
Suppression of Intemperance.

**GARST.**

Appropriations—Chairman,  
Claims,  
Public Buildings,  
Pharmacy,

Building and Loan,  
Public Libraries,  
Senatorial and Representative Dis-  
tricts.

**GILLILLAND.**

Ways and Means,  
Judiciary,  
Elections,  
Public Libraries,

Corporations,  
Cities and Towns,  
Congressional and Judicial Districts.

**HARPER.**

Military—Chairman,  
Appropriations,  
Commerce,  
Charitable Institutions,  
Building and Loan,

Labor,  
Railroads,  
Cities and Towns,  
Congressional and Judicial Districts.

**HARTSMORN.**

Printing—Chairman,  
Ways and Means,  
Federal Relations,  
Engrossed Bills,  
Highways,

Compensation of Public Officers,  
Constitutional Amendments and  
Suffrage,  
Railroads.

**HASSELQUIST.**

Highways—Chairman,  
Educational Institutions,  
Mines and Mining,  
Corporations,

Railroads,  
Congressional and Judicial Districts,  
Senatorial and Representative Dis-  
tricts.

**HAYWARD.**

Ways and Means—Chairman,  
Educational Institutions,  
Pharmacy,  
Rules,

Public Health,  
Telegraph and Telephones,  
Cities and Towns.

**HOGUE.**

Corporations—Chairman,  
Ways and Means,  
Federal Relations,  
Commerce,  
Public Lands,

Educational Institutions,  
Charitable Institutions,  
Rules,  
Agriculture.

**HOPKINS.**

Telegraph and Telephones—Chair-  
man,  
Appropriations,  
Pharmacy,  
Public Libraries,

Banks,  
Agriculture,  
Railroads,  
Schools.

**HUGHES.**

Commerce—Chairman,  
Ways and Means,  
Building and Loan,  
Military,

Labor,  
Agriculture,  
Senatorial and Representative Dis-  
tricts.

## JACKSON.

Compensation of Public Officers— Chairman, Judiciary, Charitable Institutions, Elections,	Constitutional Amendments and Suffrage, Railroads, Cities and Towns, Congressional and Judicial Districts.
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## JAMISON.

Constitutional Amendments and Suffrage—Chairman, Judiciary, Educational Institutions,	Mines and Mining, Compensation of Public Officers, Railroads, Schools.
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## JONES.

Building and Loan—Chairman, Judiciary, Public Building, Horticulture and Forestry,	Fish and Game, Engrossed Bills, Cities and Towns.
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## KIMMEL.

Fish and Game—Chairman, Federal Relations, Claims, Charitable Institutions,	Telegraph and Telephones, Agriculture, Senatorial and Representative Dis- tricts.
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## KINNE.

Appropriations, Highways, Charitable Institutions, Elections,	Telegraph and Telephones, Agriculture, Schools.
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## LAMBERT.

Ways and Means, Fish and Game, Pharmacy, Printing, Rules, Constitutional Amendments and Suffrage,	Public Libraries, Telegraph and Telephones, Labor, Suppression of Intemperance.
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## LEWIS.

Elections—Chairman, Ways and Means, Federal Relations, Claims, Highways,	Compensation of Public Officers. Banks, Senatorial and Representative Dis- tricts.
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## LYONS.

Appropriations,  
Horticulture and Forestry,  
Pharmacy,  
Charitable Institutions,  
Labor,

Suppression of Intemperance,  
Insurance,  
Senatorial and Representative  
Districts.

## MAYTAG.

Rules—Chairman,  
Appropriations,  
Manufactures,  
Mines and Mining,

Public Libraries,  
Telegraph and Telephones,  
Labor,  
Insurance.

## MOLSBERRY.

Congressional and Judicial  
Districts—Chairman,  
Ways and Means,  
Judiciary,  
Pharmacy,

Elections,  
Constitutional Amendments and  
Suffrage,  
Railroads,  
Schools.

## NEWBERRY.

Engrossed Bills—Chairman,  
Judiciary,  
Pharmacy  
Printing,

Penitentiaries and Pardons.  
Constitutional Amendments and  
Suffrage,  
Agriculture.

## SAUNDERS.

Penitentiaries and Pardons—  
Chairman,  
Judiciary,  
Appropriations,  
Pharmacy,

Constitutional Amendments and  
Suffrage,  
Public Health,  
Railroads.

## SMITH OF DES MOINES.

Ways and Means,  
Federal Relations,  
Compensation of Public  
Officers,

Public Libraries,  
Agriculture,  
Railroads,  
Cities and Towns.

## SMITH OF MITCHELL.

Railroads—Chairman,  
Appropriations,  
Penitentiaries and Pardons,  
Labor,

Suppression of Intemperance,  
Senatorial and Representative  
Districts.

## SPAULDING.

Charitable Institutions—Chairman, Appropriations, Claims, Agriculture,	Horticulture and Forestry, Highways, Public Health.
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## STIRTON.

Highways, Elections, Constitutional Amendments and Suffrage, Public Health,	Corporations, Banks, Railroads, Congressional and Judicial Districts.
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## STOCKEY.

Public Buildings—Chairman, Judiciary, Appropriations. Educational Institutions,	Printing, Penitentiaries and Pardons, Telegraph and Telephones, Military.
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## STUCKSLAGER.

Banks—Chairman. Manufactures, Constitutional Amendments and Suffrage,	Corporations, Cities and Towns, Insurance, Congressional and Judicial Districts.
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## TAYLOR.

Commerce, Manufactures, Enrolled Bills, Educational Institutions.	Building and Loan, Compensation of Public Officers, Public Health, Schools.
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## TURNER.

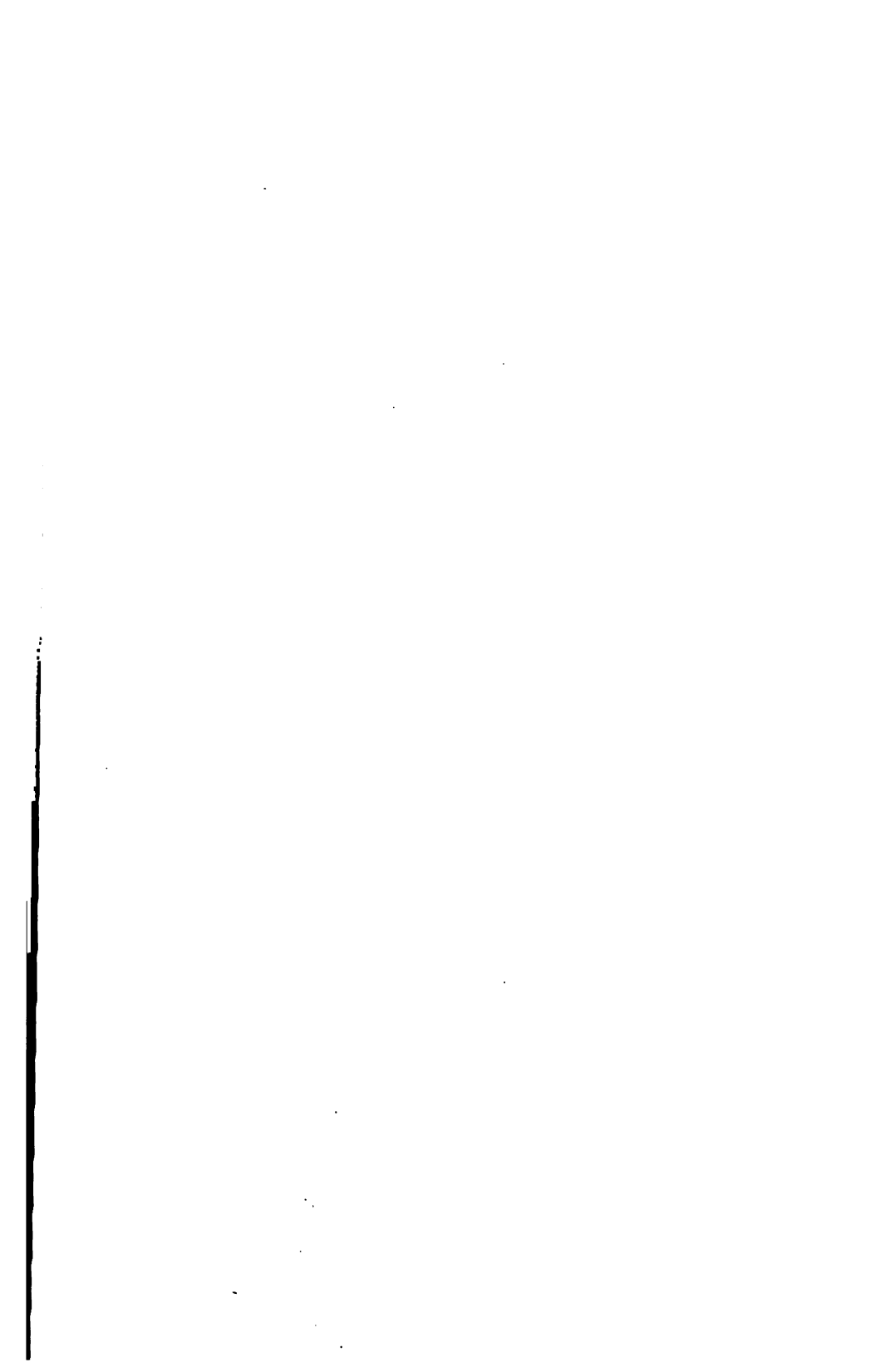
Enrolled Bills—Chairman, Appropriations, Commerce, Corporations,	Military, Cities and Towns, Insurance.
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## WADE.

Public Buildings, Building and Loan, Corporations, Insurance,	Mines and Mining, Telegraph and Telephones, Congressional and Judicial Districts.
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## WARREN.

Mines and Mining—Chairman, Rules, Suppression of Intemperance, Judiciary,	Corporations, Insurance, Schools.
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## WHIPPLE.

Insurance—Chairman,  
Judiciary,  
Corporations,  
Cities and Towns,

Schools,  
Ways and Means,  
Telegraph and Telephones.  
Suppression of Intemperance.

## WILSON OF FAYETTE.

Pharmacy—Chairman,  
Building and Loan,  
Public Health,  
Schools,

Educational Institutions,  
Labor,  
Congressional and Judicial Districts.

## WILSON OF CLINTON.

Appropriations,  
Public Lands,  
Elections,  
Cities and Towns,

Fish and Game,  
Rules,  
Military,  
Schools.

## WINNE.

Labor—Chairman,  
Fish and Game,  
Highways,  
Railroads,  
Suppression of Intemperance,

Ways and Means,  
Enrolled Bills,  
Telegraph and Telephones,  
Senatorial and Representative Dis-  
tricts.

## YOUNG OF LEE.

Federal Relations,  
Manufactures,  
Highways,  
Penitentiaries and Pardons,  
Senatorial and Representative Dis-  
tricts,

Claims,  
Mines and Mining,  
Charitable Institutions,  
Agriculture.

## YOUNG OF CALHOUN.

Public Health—Chairman,  
Printing,  
Insurance,  
Appropriations,

Mines and Mining,  
Public Libraries,  
Congressional and Judicial Districts.

## YOUNG OF WASHINGTON.

Educational Institutions—Chairman,  
Banks,  
Cities and Towns,  
Senatorial and Representative Dis-  
tricts.

Ways and Means,  
Public Health,  
Military,  
Suppression of Intemperance.

## RULES OF THE HOUSE.

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### DUTIES OF THE SPEAKER.

1. He shall take the chair every day precisely at the hour to which the House shall have adjourned; shall immediately call the members to order, and on appearance of a quorum shall cause the Journal of the preceding day to be read.

2. He shall preserve order and decorum, and speak to points of order in preference to other members, rising from his seat for that purpose; and he shall decide questions of order, subject to an appeal to the House by any two members.

3. He shall rise to put a question, but may state it sitting.

4. Questions shall be distinctly put in this form, to wit: "As many as are of the opinion that (as the question may be) say 'aye;'" and after the affirmative voice is expressed, "As many as are of a contrary opinion, say 'no.'" If the Speaker doubts, or a division is called for, the House shall be divided. Those in the affirmative of the question shall first rise from their seats, and afterward those in the negative.

5. The Speaker shall have a right to name any member to perform the duties of the chair, but such substitution shall not extend beyond an adjournment, except that in case of the absence of the regular Speaker, the House may proceed to elect a Speaker, pro tem., whose acts shall have the same validity as those of the Speaker.

6. All committees shall be appointed by the Speaker, unless otherwise especially directed by the House.

7. In all cases of a call of t e yeas and nays, the Speaker shall vote; in other cases he shall not be required to vote unless the House is equally divided, or unless his vote, if given to the minority, will make the division equal, and in case of such equal division the question shall be lost.

8. All acts, addresses and joint resolutions shall be signed by the Speaker, and all writs, warrants, subpoenas, issued by order of the House, shall be under his hand and attested by the Clerk.

9. In case of any disturbance or disorderly conduct in the lobby, the Speaker or Chairman of the Committee of the Whole House shall have the power to have the same cleared.

10. After the Journal is read the following order shall govern:

1. Business pending at last previous adjournment.
2. Petitions or remonstrances to be offered.
3. Reports of committees:
  - Ways and Means.
  - Judiciary.
  - Appropriations.
  - Railroads and Commerce.
  - Schools and Text-Books.
  - Normal Schools.
  - Suppression of Intemperance.
  - Agriculture.
  - Mines and Mining.
  - Retrenchment and Reform.
  - Claims.
  - Compensation of Public Officers.
  - Insurance.
  - Banks and Banking.
  - Animal Industry.
  - County and Township Organization.
  - Roads and Highways.
  - Building and Loan.
  - Other committees.
4. Resolutions laid over under Rule 34.
5. Bills to be introduced.
6. Resolutions.
7. Messages and communications on the Speaker's table.
8. Bills and resolutions read a second time.
9. Bills on their passage.
10. Reports in the possession of the House shall be taken up in their order.
11. On and after the 10th day of February of each regular session, bills and joint resolutions which have been read the second time and engrossed shall be taken up in their proper order at three o'clock in the afternoon of each session and put upon their passage.

## OF DECORUM AND DEBATE.

11. When any member is about to speak in debate, or deliver any matter to the House, he shall rise from his seat and respectfully address himself to the presiding officer by his title, saying, "Mr. Speaker," and shall not proceed until he shall be recognized by the Chair, and shall confine himself to the question under debate and shall avoid personalities.

12. When any member in speaking, or otherwise, transgresses the rules of the House, the Speaker shall, or any member may, call him to order; in which case the member so called to order shall immediately sit down, but may be permitted with leave of the House to explain; and the House shall, if appealed to, decide the case, but without debate. If there be no appeal, the decision of the Chair shall be submitted to; if the decision be in favor of the member so called to order, he is at liberty to proceed. If the case requires it, he shall be liable to the censure of the House.

13. When two or more members happen to rise at once, the Speaker shall designate the member entitled to speak.

14. No member shall speak more than once on the same question without leave of the House, nor more than twice until every member choosing to speak shall have spoken, except as provided in section 26; provided further, when bills are being considered on their second reading debate thereon shall be limited to fifteen minutes to each member desiring to speak thereon, which may be extended by consent of the House.

15. While the Speaker is putting any question, or addressing the House, none shall walk out or across the House, or, when a member is speaking, shall entertain private discourse, nor while a member is speaking, pass between him and the Chair.

16. No member shall vote on any question in the event of which he is personally interested.

17. Upon a division and count of the House on any question, only those members standing in their places shall be counted.

18. Every member who shall be in the House when the question is put shall give his vote, unless the House for special reasons shall excuse him; but such a member must ask to be excused before commencing to take the vote on the main question.

19. When a motion is made and seconded, it shall be stated by the Speaker; or, being in writing, it shall be passed to the desk and read aloud by the Clerk before debated.

20. Every motion, except subsidiary or incidental motions shall be reduced to writing if the Speaker or any member desires it, but this exception shall not apply to motions to amend.

21. All bills, resolutions, petitions, memorials or other papers shall be accompanied by the name of the member presenting the same, and also the name of the county.

22. After a motion is stated by the Speaker, or read by the Clerk, it shall be deemed to be in possession of the House, but may be withdrawn by leave of the House.

23. When a question is under debate no motion shall be received but to adjourn; to lay on the table; for the previous question; to postpone to a certain day; to commit or amend; to postpone indefinitely; which several motions shall have precedence in the order in which they are arranged, and no motion to postpone to a day certain, to commit or postpone indefinitely being decided, shall again be allowed on the same day, and at the same stage of the bill or proposition. A motion to strike out the enacting words of a bill shall have precedence of a motion to amend; and, if carried, shall be considered equivalent to its rejection.

24. When a resolution shall be offered or a motion made to refer any subject, and different committees shall be proposed, question shall be taken in the following order: The Committee of the Whole House; a Standing Committee; a Select Committee.

25. A motion to adjourn shall always be in order, except when a member is speaking, or the House voting.

26. The previous question shall always be put in this form: "Shall the main question now be put?" It shall only be admitted when demanded by a majority of the members present, and its effect shall be to put an end to all debate, and to bring the House to a direct vote upon amendments and then upon the main question, except that the member in charge of the measure under consideration shall have ten minutes in which to close the discussion before the vote is taken. On a motion for the previous question and prior to seconding the same, a call of the House shall be in order; but after such motion shall have been adopted no call shall be in order prior to the decision of the main question. If the previous question is decided in the nega-

tive, the House shall proceed with the matter before it the same as though the previous question had not been moved.

27. Motions to lay on the table, to adjourn, and for the previous question, shall be decided without debate.

28. When a question is postponed indefinitely, it shall not be acted upon during the session.

29. Any member may call for a division of the question, which shall be decided if it comprehends questions so distinct that one being taken away, the rest may stand entire for the discussion of the House. A motion to strike out being lost shall preclude neither an amendment nor a motion to strike out and insert. A motion to strike out and insert shall be deemed indivisible.

30. Motions and reports may be committed at the pleasure of the House.

31. No motion or proposition on a subject different from that under consideration shall be admitted under color of amendment.

32. When a motion has been made and carried or lost, it shall be in order for any member of the majority, on the same or succeeding day, to move for a reconsideration thereof, and such motion shall take precedence of all other questions except the consideration of a conference report, a motion to fix the day to which House shall adjourn, to adjourn, or to take a recess, and shall not be withdrawn after the said succeeding day without the consent of the House; and thereafter any member may call it up for consideration, provided that such motion, if made during the last six days of the session, shall be disposed of when made.

33. Petitions, memorials, and other papers addressed to the House, shall be presented by the Speaker or a member in his place; a brief statement of the contents thereof shall verbally be made by the introducer, and shall be referred to the committee of his selection, unless otherwise ordered by the House.

34. A proposition requesting information from the Governor, Secretary or any other State officer, and all resolutions shall lie on the table one day for consideration, unless otherwise ordered by the House; and all such propositions shall be taken up for consideration in the order they were presented, immediately after the reports are called for from the Select Committee, and when adopted, the Clerk shall cause the same to be delivered.

35. Any five members, if the Speaker be in the Chair, shall be authorized to compel the attendance of absent members.

36. Upon calls of the House, or in taking the yeas and nays on any question, the names of the members shall be called alphabetically, except that "Mr. Speaker" shall be called last.

37. No member shall absent himself from the service of the House without leave unless he be sick or unable to attend.

38. Upon the call of the House, the names of the members shall be called by the Clerk, and the absentees noted, after which the names of the absentees shall again be called over, and the Sergeant-at-Arms be directed by the Speaker to compel their attendance. Any member occupying his seat during a call of the House shall be counted by the Speaker and his name entered in the Journal as being present but not voting, for the purpose of making a quorum.

39. No committee shall sit during the sitting of the House without special leave.

40. A majority of the members shall constitute a quorum, and upon demand of any two members the yeas and nays shall be ordered; the members demanding the yeas and nays shall arise for that purpose, and their names shall be entered in the Journal.

41. The hours to which this House shall stand adjourned from day to day shall be nine o'clock A. M., and two o'clock P. M. unless otherwise ordered by the House.

42. A committee on pairs shall be appointed, to consist of two persons, one of whom shall be selected by the members of each of the two dominant political parties represented in the House. It shall be the duty of the committee to arrange all pairs between members, and to announce such pairs and the time for which they shall continue, to the House, which announcement shall be entered on the Journal. Thereafter neither member so paired shall vote (upon any question of a political or partisan nature) until the time of pairing has expired, unless such pair is sooner dissolved by the mutual agreement of the persons so paired. When pairs are dissolved such dissolution shall be entered on the Journal of the House.

#### ON BILLS.

43. All bills and joint resolutions introduced in the House shall be typewritten, accompanied by a carbon duplicate; one copy shall be marked and known as the "original" and one

copy marked and designated as "printer's copy." The "original" shall, after registration, be subject to delivery to the chairman of the committee to which reference is made, unless otherwise ordered, and the "printer's copy" shall be delivered to the State Printer.

44. No bill carrying an appropriation shall be introduced after March 1, 1906, except by the Committee on Appropriations.

45. Every bill shall receive three several readings, but no bill shall have its second and third reading on the same day.

46. The first reading of the bill shall be for information; and if opposition be made to it, the question is: "Shall this bill be rejected?" If no opposition be made, or if the question to reject be negatived, the bill shall go to its second reading without a question.

47. Upon a second reading of a bill, the Speaker shall state that it is ready for commitment, amendment or engrossment; and if committed, then the question shall be whether to a select or a standing committee, or to a Committee of the Whole House. If to a Committee of the Whole House, the House shall determine on what day.

48. All bills to appropriate money shall be referred to the Appropriations Committee, and all bills pertaining to the levy, assessment or collection of taxes shall be referred to the Committee on Ways and Means.

49. After a bill has been committed and reported back it shall be considered on its second reading after the amendments of committee have been read.

50. After the commitment and report thereof to the House, or any time before its passage, a bill may be re-committed.

51. All bills ordered to be engrossed shall be written with typewriter with black record ribbon.

52. No amendment, unless by way of correcting an error or omission, shall be received to any bill on its third reading, and no debate shall be allowed on the same.

53. When a bill shall pass it shall be certified by the Clerk, noting the day of its passage at the foot thereof.

54. No standing rule or order of the House shall be rescinded or changed without one day's notice being given of the motion therefor, nor shall any rule be suspended except by a vote of at least two-thirds of the members present; nor shall the order of business, as established by the rules of the House, be postponed

or changed except by a vote of at least two-thirds of the members present.

55. It shall be the duty of the Committee on Enrolled Bills to report at any time.

56. All bills, memorials and joint resolutions shall be printed for the use and information of the members, unless otherwise ordered by the House.

57. When any matter is referred to a standing committee by motion of any member, it shall be the duty of the chairman of such standing committee to notify such member of the time of their sitting upon such matter referred, and such member shall be permitted to confer with such committee during their consideration of such matter, but no one not a member of the committee shall be present when the final vote is taken on any matter under consideration.

58. Each standing committee of the House shall classify all bills referred to it. The bills of the greatest public importance shall be placed in the first class, and all other bills in the second class. Bills of the first class shall be first considered and reported to the House and no committee shall retain possession of any bill longer than ten days, except by consent of the House. But this shall not apply to the Committee on Appropriations.

59. The rules of parliamentary practice comprised in Cushing's Manual shall govern the House in all cases where they are not inconsistent with the standing rules of this House and Joint Rules of both Houses.

60. Joint resolutions shall be framed and treated as a bill.

61. The chairman or clerk of a committee to which a bill is referred shall note thereon the date of its reference, and it shall be the duty of each committee to report back all bills in its hands within ten days after the order of reference, unless longer time is granted by a vote of the House. The minority of any committee may present its recommendations in writing with the report of the committee, and the same shall be printed in the Journal, and said recommendation may, by vote of the House, be substituted for the report of the committee. The clerks of the different committees shall be subject to their respective chairmen.

62. Seven members, or a majority, shall constitute a quorum of each standing committee.

63. When a committee is called the chairman of such committee shall be considered as having the floor until the next committee shall be called.

64. When the House reaches the order of the "Introduction of Bills" the roll shall be called, and each member in his order shall introduce such bills as he may desire.

65. No member or officer of the House shall be permitted to read newspapers within the bar of the House while the Journal is being read, nor shall any person be permitted to smoke on the floor of the House during its session, or in the galleries at any time.

66. No one shall be admitted to the floor of the House during its sessions, except members of the General Assembly and employees in the performance of their duties, ex-members of the General Assembly and officers of the State Government, Judges and ex-Judges of the Supreme, District and Circuit Courts, the families of members of the House, Trustees, Superintendents and officers of the State Institutions, on the invitation of the member from the district in which the institution is located, and each member shall have the right to admit a friend who may be visiting him. Representatives of the press to be admitted to the reporters' gallery.

#### DUTIES OF OFFICERS.

67. The Clerk of the House shall have charge of the Clerk's desk, and shall see that no one is permitted therein except himself and those assisting him. He shall be responsible for the custody and safe-keeping of all bills, resolutions and other matters laid before or introduced into the House, except while the same are in the possession of the committee to whom the same shall have been referred, and when delivering the same to said committee he shall take a proper receipt therefor. He shall see that the Journal of each day's proceedings is correctly and fully kept and fully made up before the next day's session, and be responsible for its safe-keeping. He shall have control of rooms four and five, which are assigned to said Clerk for the use of himself and his assistants. He shall endorse on every bill or joint or concurrent resolution, the date of its introduction and by what member, or of its receipt from the Senate, and also what action relating thereto is taken by the House. The assistant clerks shall be under his direction and he shall assign them their several duties in connection with the work of the Clerk's desk.

The Sergeant-at-Arms shall wear the appropriate badge of his office, shall attend the House during its sessions, shall aid during the enforcement of order, under the direction of the Speaker of the House, shall execute the commands of the House from time to time, together with such process, issued by the authority thereof, as shall be directed to him by the presiding officer; shall, upon request of any member, have the House lighted up during any evening within, the session except Sunday, to an hour not later than 10 P. M.; shall see that no person, except those authorized so to do, disturbs or interferes with the desks of the members, or with the books, papers, etc., thereat; shall see that the printed bills are properly distributed and filed upon the desks of the members, shall have charge of the files in the House bill room, and shall see that no copy of bill is given except to or upon the order of the Speaker of the House, or member, or State officer; shall see that an additional doorkeeper is detailed for duty at the House upon each day within the session, except Sunday, from 8:30 A. M. to 10:00 P. M.; but should no member of the House desire to occupy the chamber to that hour the detail may be relieved at 9:00 P. M.; shall have charge of the messengers of the House and see that they severally perform their duties, and shall promptly report to the Speaker of the House any inefficiency or violations of duty on the part of said messengers.

The Doorkeeper of the House shall wear his appropriate badge of office; shall have special charge of the main door of the chamber during the sittings of the House, and shall see that the other doors of the House are properly attended to; shall have general charge and oversight of the additional doorkeepers of the House; shall detail such of the additional doorkeepers for such general or special duties as the Sergeant-at-Arms may deem proper or necessary for the efficiency of the House and the protection of the property within the chamber; shall see that the rule relating to admission to the floor of the chamber is strictly enforced; shall, ten minutes before the opening of each session of the House, see that the floor is cleared of all persons not entitled to occupy the same during the session; shall attend to seating visitors, and shall announce all committees and messages from the Governor or Senate.

The Janitors of the House shall have charge, under the direction of the Sergeant-at-Arms, of the cloak and retiring rooms adjoining the chamber, and shall see that the same are kept in proper order.

The messengers of the House shall attend the House during its sittings and perform the duties generally devolving on like employees. The messengers shall be under the direction of the Sergeant-at-Arms while the House is not sitting, and shall attend to such duties as he may assign them.

OF COMMITTEE OF THE WHOLE HOUSE.

68. In forming Committee of the Whole House, the Speaker shall leave his chair, and a Chairman to preside in committee shall be appointed by the Speaker.

69. Upon bills committed to the Committee of the Whole House, the bill shall be first read throughout by the Clerk or Chairman, and then read again or debated by the clauses, leaving the preamble to be last considered. After report, the bill shall be again subject to be debated and amended by clauses before a question to engross it be taken.

70. All amendments made to an original motion in Committees shall be incorporated in a motion and so reported.

71. All amendments made to a report committed to a Committee of the Whole House shall be noted and reported as in the case of bills.

72. In filling up blanks in the Committee of the Whole House, and in the House, the largest sum and the longest time and the highest number shall be first put.

73. The Rules of the House shall be observed in Committee of the Whole House, so far as they are applicable.

## JOINT RULES.

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1. Whenever either House shall amend a measure, and the other House shall refuse to concur in and adopt the amendment, the House which has adopted such amendment shall either insist on or recede from the same. But when a measure originating in one House is amended in the other, the House in which it originated may amend such amendment, and a motion therefor shall take precedence of a motion to recede, and a motion to recede of a motion to insist. In case a motion to insist on the amendment be decided in the negative, such action shall be deemed a receding from the amendment, and so entered upon the Journal of the House. In case the amendment is insisted upon, the House so insisting shall request a Committee of Conference on the subject of disagreement, and shall appoint a committee therefor. The other House shall thereupon appoint such a committee. Unless another number is specified in said request, such Conference Committee shall consist of four members from each House. They shall meet at a convenient time, to be agreed upon by their chairman, and having conferred freely, each shall report to their respective House the result of their conference. In case of agreement, the report shall be first made, with the papers referred accompanying it, to the House which refused to concur, and there acted upon; and such action shall be immediately reported by the Secretary or Clerk to the other House, the papers referred accompanying the message. In case of disagreement of Conference Committee, the papers shall remain with the House which insisted on the amendment. The agreeing report of a Conference Committee shall be made, read and signed in duplicate by all the members of the Committee, or by a majority of those of each House, one of the duplicates being retained by the committee of each House. Should either House disagree to the report of the Committee, such House shall appoint a second Committee, and request a further conference, which shall be

acceded to by the other House before adhering. The motion for a Committee of Conference and the report of such Committee shall be in order at any time. When both Houses shall have adhered to their disagreement, a bill or motion is lost.

2. When a message shall be sent from either House to the other, it shall be announced at the door of the House to which it is sent by the doorkeeper thereof, and shall be respectfully communicated to the Chair by the person by whom it is sent.

3. All messages between the two Houses shall be communicated by the Secretary or Chief Clerk, or their respective assistants.

4. When a bill shall have passed both Houses, it shall be duly enrolled by the Enrolling Clerk of the House in which it originated, and the fact of its origin shall be certified by the endorsement of the Secretary or Clerk thereof.

5. When the bills are enrolled they shall be examined by a Joint Committee of two from the Senate and two from the House of Representatives, who shall be a Standing Committee for that purpose, and who shall carefully compare the enrollment with the engrossed bills, as passed in the Houses, correct any errors therein, and make report thereof forthwith to their respective Houses.

6. After the report, each bill shall be signed, first by the Speaker of the House of Representatives, and then by the President of the Senate, in the presence of their respective Houses.

7. After a bill shall have been thus signed in each House, it shall be forthwith presented, by Committee of the House in which the bill originated, to the Governor for his approval, and they shall forthwith report the date of presentation, which shall be entered upon the Journal of the House in which the bill originated.

8. All orders, resolutions, memorials or other votes, which are to be presented to the Governor for his approval, shall be enrolled, examined, signed and presented in the same manner as bills.

9. When any bill, resolution or memorial, which shall have passed in one House, is rejected or adopted in the other, notice of such action shall be given to the House which passed the same. And each bill, resolution or memorial shall have properly endorsed thereon, at the time of its transmission, a statement signed by the Secretary or Clerk of the action which has been

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taken thereon by the House transmitting the same, with the dates thereof.

10 When a bill, resolution or memorial which shall have passed one House is rejected in the other, it shall not be again introduced during the session without five days' notice and leave of a majority of the members of the House in which the same is sought to be introduced.

11. Each House shall transmit to the other with any bill, resolution or memorial all papers upon which the same shall be founded.

12. When any report, bill or resolution shall be ordered printed by either House, without stating the number, three hundred copies shall be printed for the use of both Houses, but when any bill or resolution which may have passed one House is ordered printed by the other, a greater number of copies shall not be printed than the House making the order shall determine.

13. It shall be the duty of the Chief Clerk of the House of Representatives and the Secretary of the Senate, when any document, except bills and resolutions, is ordered to be printed in their respective Houses, forthwith to communicate such order to the other House.

14. In all elections in Joint Convention of the two Houses, the names of all members shall be arranged in alphabetical order, and they shall be called upon to vote in the order in which they stand arranged.

15. It shall be the duty of the Committee on Claims in each House to keep a book of record, in which shall be entered each claim for money against the State referred to them, whether presented in favor of private persons, or municipal or other corporations, entering therein the name of the claimant, the amount of the claim, the grounds therefor, with note of the evidence offered in support of the same, and the final conclusion of the Committee thereon. At the close of the session said book of record shall be deposited with the Auditor of State to be kept by him, and he shall provide an index, showing the names of the claimants recorded therein. At any subsequent session the same shall be delivered, when desired, to the like committee having jurisdiction of such claims, and shall always be open to the examination of the said Committee of either House.

# REPRESENTATIVES

District	NAME	P. O. ADDRESS	COUNTIES IN DISTRICT	OCCUPATION	NATIVITY	Age
7	Bailey, M. Z.	Diagonal.	Ringgold.	Farmer.	Iowa.	49
48	Bealer, E. J. C.	Cedar Rapids.	Linn.	Contractor.	Switzerland.	50
68	Bixby, R. J.	Edgewood.	Delaware.	Farmer and Stock.	Iowa.	51
40	Boland, Edward.	Williamsburg.	Iowa.	Farmer.	Ireland.	37
77	Buckingham, F. N.	Alta.	Buena Vista.	Farmer.	Illinois.	20
43	Calderwood, M. H.	Eldridge.	Scott.	Banker.	Iowa.	42
20	Carden, William.	Winfield.	Henry.	Real Estate and Loans.	Iowa.	42
45	Carstensen, Theo.	Clinton.	Clinton.	Woodworker.	Iowa.	40
19	Cassel, A. F.	Lockridge, R. I.	Jefferson.	Farmer.	Germany.	23
78	Chassell, E. D.	LeMars.	Plymouth.	Pub and Com Traveler.	Sweden.	60
82	Cheney, A. H.	Spencer.	Clay, Palo Alto.	Implement Dealer.	New York.	38
63	Christianson, G. P.	Randall.	Hamilton.	Grain Dealer.	Vermont.	40
39	Clark, Elbert W.	Grunell.	Poweshiek.	Physician & Surgeon.	Denmark.	38
36	Clarke, G. W.	Adel.	Dallas.	Lawyer.	Vermont.	40
86	Clary, Jim C.	New Hampton.	Chickasaw.	Lawyer.	Indiana.	49
8	Cobb, William.	Bedford.	Taylor.	Minister & Farmer.	Wisconsin.	33
59	Coburn, Geo. F.	Marcus.	Cherokee.	Farmer.	Indiana.	60
55	Colto, C. C.	Carroll.	Carroll.	Editor.	Illinois.	30
73	Conn, Stanley.	Parkersburg.	Butler.	Farmer.	Ohio.	51
9	Crose, Chas. F.	Shenandoah.	Page.	Retired Merchant.	Canada.	54
51	Cummings, B. F.	Marshalltown.	Marshall.	Lawyer.	Iowa.	49
					New York.	41

\* Elected November 8, 1904, to fill vacancy caused by death of Thomas Harris.

16	Darrah, John H†	Chariton	Lucas	Merchant	Illinois	30
27	Dashiell, Mark A.	Indianola	Warren	Physician & Surgeon	Indiana	52
36	<i>Davis, William A.</i>	Dunlap	Crawford	Farmer and Stock	Illinois	49
3	<i>DeMar, John C**</i>	Belknap	Davis	School Teacher	Iowa	26
53	Doran, Justin R.	Beaver	Boone	Farmer	New York	35
74	Dow, D. W.	Hampton	Franklin	Attorney	Michigan	46
37	English, Emory H.	Altoona	Polk	Editor & Publisher	Iowa	35
18	Epperson, F. M. ††	Eddyville	Wapello	Banker	Kentucky	45
70	Fienniken, J. C.	Strawberry Pt.	Clayton	Real Estate	Iowa	43
31	Freeman, W. H.	Oakland	Pottawattamie	Banker, Stock & Fmr	Illinois	40
69	<i>Frudden, A. F.</i>	Dubuque	Dubuque	Lumber Merchant	Germany	21
24	<i>Geneva, Thomas</i>	What Cheer	Keokuk	Merchant & Live Stock	England	44
52	Greeley, W. M.	Ames	Story	Banker	New York	40
28	Greene, Robert A.	East Peru	Madison	Merchant	Iowa	40
13	Gregory, Ross H.	Nevinsville	Adams	Physician	Illinois	12
76	<i>Hates, Montague</i>	Laurens	Pocahontas	Merchant	Iowa	48
25	Hambledon, A. F. N	Oskaloosa	Mahaska	Real Estate & Loans	Iowa	48
83	Hanna, George W.	Luverne	Kosuth	Banker & Farmer	Iowa	55
87	Hart, William S.	Waukon	Allamakee	Lawyer	Iowa	37
54	Head, Mahlon	Jefferson	Greene	Banker	Ohio	50
19	<i>Heles, Philip</i>	N Buena Vista R 2	Dubuque	Farmer	Iowa	45
29	Hollembeak, R. W.	Adair	Adair	Farmer	Illinois	30
90	Hume, Thomas H.	St. Ansgar	Mitchell	Lumber & Coal	Iowa	37
88	Jacobson, Abrah'm	Decorah R 1	Winnebiek	Farmer & Minister	Norway	55
38	Jepson, C. N.	Sioux City	Woodbury	Lawyer	Iowa	33
12	Jones, F. F.	Villisca	Montgomery	Banker & Merchant	New York	30
17	Kendall, N. E.	Albia	Monroe	Lawyer	Iowa	37
1	Kennedy, Chas. A	Montrose	Lee	Nurseryman	Iowa	36
32	Kling, H. B.	Woodbine	Harrison	Lumber and Banking	Wisconsin	28
41	<i>Koats, Geo W</i>	Iowa City	Johnson	Banker	Pennsylv'a	52
10	<i>Laird, F. M</i>	Tabor	Fremont	Farmer	Iowa	50
45	<i>Langan, Reym'd C.</i>	Clinton	Clinton	Attorney	Iowa	32
44	Leech, Louis J.	West Branch	Cedar	Physician & Surgeon	Ohio	50
65	Lister, John	Conrad	Grundy	Farmer and Stock	Illinois	32

\*Elected November 7, 1905, to fill vacancy caused by removal of Eli Manning

\*\*Elected October 17, 1905, to fill vacancy caused by death of W. P. Peto

††Elected November 8, 1904, to fill vacancy caused by death of A. W. Buchanan.

District	NAME	P.O. ADDRESS	COUNTIES IN DISTRICT	OCCUPATION	NATIVITY	Years in Legislature	Age
61	Lowrey, Jason H.	Pomeroy	Calhoun	Banker and Real Estate	Illinois	37	55
50	Lund, J. J.	Berlin	Tama	Farmer	Germany	37	54
48	McAllister, John	Cedar Rapids	Linn	Retired Farmer & Stock	Ireland	39	65
22	McClurkin, E. L.	Morning Sun	Louis	Banker and Farmer	Iowa	47	67
4	McCreary, Wm. M.	Centerville	Appanoose	Druggist and Banker	W. Virginia	49	67
5	McCulloch, Geo.	Humeston	Wayne	Physician and Banker	Ohio	34	57
46	McDole, Albert E.	Sabula	Jackson	Lumber and Stock	New York	52	55
58	McElrath, Wm. W.	Moville	Woodbury	Farmer and Banker	New York	24	56
49	McNie, Malcolm F.	Vinton	Benton	Farmer and Banker	Iowa	49	57
92	Maben, O. K.	Forest City	Hancock, Humboldt	Farmer	Iowa	37	37
31	Martin, Robert J.	Hancock	Pottawattamie	Merchant and Implements	Canada	34	42
60	Mattes, Joseph	Odebolt	Sac	Hardware Merchant	Iowa	50	50
30	Meredith, C. A.***	Atlantic	Cass	Lawyer	Iowa	42	42
79	Morris, James F.	Ireton	Sioux	Farmer and Stock	Illinois	50	51
34	Mott, D. C.	Audubon	Audubon	Editor	Ohio	43	47
42	Nichols, J. I.	West Liberty	Muscatine	Farmer	Iowa	50	50
38	Offill, John F.	Prairie City	Jasper	Farmer and Stock	Kentucky	38	60
91	Olson, H. L."	Northwood	Winnebago, Worth	Farmer	Norway	49	60
47	Pet, R. M.	Springville	Jones	Farmer and Stock	Iowa	49	49
85	Powers, P. H.	Powersville	Floyd	Farmer & Manufacturer	Canada	38	65
75	Pritchard, J. S.	Belmond	Wright	Farmer	Michigan	49	58
21	Ritter, Henry	Burlington	Des Moines	Brick Manufacturer	Iowa	53	53
93	Robinson, B. F.	Armstrong	Dickinson, Emmet	Banker	Connectic't	36	56
6	Sankay, E. J.	Leon	Decatur	Farmer, RI Est. & Lns	Pennsylv'a	56	62
72	Saylor, W. W.	Waverly	Bremer	Travel'g L'mb'r Aud.	Pennsylv'a	44	46
71	Shaffer, J. D.	Elgin, R. I.	Fayette	Farmer	Iowa	47	47
14	Skinner, Scott	Creston	Union	Railway Engineer	Iowa	53	53
89	Spaulding, H. L.	Elma	Howard	Attorney	New Hamp.	36	42
67	Springer, L. F.	Independence	Buchanan	Lawyer	Pennsylv'a	26	53
84	Stanbery, John S.	Mason City	Cerro Gordo	Lawyer	Ohio	50	59
43	Stoltenberg, A. H.	Davenport	Scott	Manufacturer & Banker	Iowa	42	42
2	Summers, L. F.	Milton	Van Buren	Physician & Druggist	Missouri	33	57

37	Teachout, H. E.	Des Moines.	Polk.	Banker & Ice Dealer.	New York.	30
15	Temple, M. L.	Oscola.	Clarke.	Lawyer.	W. Virginia.	32
26	Teter, Lorenzo D.	Knoxville.	Marion.	Lawyer.	Iowa.	35
81	Van Eaton, G. L.†	Little Rock.	Lyon, Osceola.	Real Estate & Ins.	Indiana.	33
11	Washburn, A. B.	Hastings.	Mills.	Farmer.	Iowa.	36
35	Weeks, Elbert W.	Guthrie Center.	Guthrie.	Lawyer.	Ohio.	50
64	WELDEN, Wm.††	Iowa Falls.	Monona, Ida.	Merchant.	Wisconsin.	38
57	Whiting, W. L. C.	Whiting.	O'Brien.	Lbr. & Imp. Dealer.	Iowa.	48
80	Whitmer, G. R.††	Primbar.	Wellman.	Banker.	Iowa.	40
23	Wilson, H. H.	Cedar Falls.	Black Hawk.	Retired Farmer.	Germany.	51
65	Wise, Charles A.	Ft. Dodge.	Webster.	Banker.	England.	58
62	Wright, Robert M.	Harlan.	Shelby.	Attorney.	Indiana.	29
33	Wyland, O. P.			Real Estate.	Iowa.	49

Republicans in roman—74. Democrats in italics—20. Independent Republicans in small capitals—3.  
† Elected November 7, 1905, to fill vacancy caused by removal of O. B. Lamkin. †† Republican in politics, elected on Citizens ticket. ††† Republican in politics, elected on Citizens ticket. \*\* Elected December 19, 1905, to fill vacancy caused by death of L. L. DeLano.

## ADDITIONAL INFORMATION.

*Former Legislative Service.*—All members of the House of Representatives, except E. W. Clark, Darragh, De Mar, Epperson, Meredith and Van Eaton, who were elected to fill vacancies, served during the 30th General Assembly. Those having additional legislative services are as follows:  
Bailey, H. 29; Bealer, H. 29; Calderwood, elected to fill vacancy in H. 28, 29; Carden, H. 29; Cassel, H. 29; Chassell, H. 25; Cheney, H. 25; Christianson, H. 29; Clarke, H. 28, 29; Coburn, H. 28, 29; Cole, H. 29; Cummings, H. 29; Dashiell, H. 13, S. 14, 15, 18, 19; Davie, H. 22, 23, 29; English, H. 25; Epperson, H. 18, 19; Flenniken, H. 29; Freeman, H. 29; Frudden, H. 29; Greeley, H. 29; Greene, H. 29; Hendrich, H. 28, 29; Kendall, H. 28; King, H. 29; Koontz, H. 27, 28, 29; Langan, H. 29; Leach, H. 29; McCulloch, H. 29; McCulkin, H. 19; McNie, H. 29; Maties, H. 29; Nichols, H. 29; Power, H. 29; Pritchard, H. 29; Robinson, H. 29; Springer, H. 29; Teachout, H. 29; Temple, H. 29; Tetter, H. 29; Whiting, H. 29; Wise, H. 29; Wright, H. 19.

*Military Service.*—Bealer, Corporal Co. A, 2d Iowa Infy.; Cheney, First Sergeant 10th Vt. Infy.; Captain 7th and Major 142d U. S. C. T.; Cobb, Corporal Co. 2, 29th Iowa Infy.; Dow, Second Lieutenant Co. G, 44th Iowa Infy.; Epperson, First Sergeant 59th Iowa Infy.; Greeley, Captain 151st New York Infy.; Hart, Private, 2d Lieut., 1st Lieut., and Captain 40th Iowa Infy.; S. A. W.; Head, 2d Lieut. Co. F, 10th Iowa Infy.; Leach, Corporal Co. B, 2d Iowa Cav.; McAllister, Sergeant Co. I, 69th Ohio Infy.; McGreevy, 1st Lieut. Co. G, 59th Iowa Infy.; O'Neil, Private, Co. A, 3d Iowa Cav.; Olson, Private Co. B, 32d Iowa Infy.; Pritchard, Private, 2d Iowa Cav.; Sankay, Private, Co. L, 3d Iowa Vet. Vol. Cav.; Van Eaton, Private 10th Wisconsin Infy.

*Education.—Rural School:*—Bailey, Bolland, Buckingham, Cassel, Cobb, Coburn, Conn, Doran, Epperson, Head, Heise, Kendall, Lundt, McAllister, Nichols, Peet, Pritchard, Stanbery, Van Eaton, Welden.

*Common School.*—Frudden, McCreary, Olson, Sankay, Wyland.

*Graded Schools.*—Bealer, Carstensen, Davis, English, Flenniken, Freeman, McDole, Morris, Powers.

*High School.*—Jones, Kennedy, Koontz, Lowrey, Mattes, Mott, Summers, Wise.

*Business College.*—Crose, Geneva, Ritter.

*Academy.*—Cheney, Darragh, Dashiell, Dow, Greeley, Hart, Hume, Kling, Laird, Mabey, Martin, Robinson, Teachout, Whiting, Willson.

*College.*—Bixby, Calderwood, Carden, Chassell, Christianson, Clark (E. W.), Clarke (Geo. W.), Clary, Cole, Cummings, DeMar, Greene, Gregory, Hakes, Hambleton, Hanna, Holtzbeak, Jacobson, Langan, Leach, Lisher, McClurkin, McCulloch, McElrath, McNie, Meredith, O'Neil, Saylor, Shaffer, Skinner, Spaulding, Springer, Stoltenberg, Temple, Teter, Washburn, Weeks, Wright.

Married, 58. Single, Chassell, Christianson, De Mar, Kennedy, Langan, Springer, Teter—7. Widowers, Calderwood, Carstensen, Cassel, Lowrey, Welden—5.



## STANDING COMMITTEES OF THE HOUSE.

## WAYS AND MEANS.

Temple of Clarke,  
 Head of Greene,  
 English of Polk,  
 Cummings of Marshall,  
 Kendall of Monroe,  
 Carden of Henry,  
 Bealer of Linn,  
 Greene of Madison,  
 Freeman of Pottawattamie,  
 McClurkin of Louisa,  
 Flenniken of Clayton,  
 Cheney of Clay,  
 Kling of Harrison,  
 Pritchard of Wright,  
 Powers of Floyd,  
 Bailey of Ringgold,  
 Geneva of Keokuk,

Robinson of Emmet,  
 Crose of Page,  
 Stoltenberg of Scott,  
 Buckingham of Buena Vista  
 Shaffer of Fayette,  
 Summers of Van Buren,  
 Mott of Audubon,  
 Carstensen of Clinton,  
 Cobb of Taylor,  
 Clark of Poweshiek,  
 Epperson of Wapello,  
 Darrah of Lucas,  
 Van Eaton of Lyon,  
 Whiting of Monona,  
 Ritter of Des Moines,  
 Hakes of Pocahontas,  
 Laird of Fremont.

## JUDICIARY.

Kendall of Monroe,  
 Temple of Clarke,  
 Cummings of Marshall,  
 Wright of Webster,  
 Jepson of Woodbury,  
 Hart of Allamakee,  
 Spaulding of Howard,  
 Teter of Marion,  
 Weeks of Guthrie,  
 Stanbery of Cerro Gordo,  
 Dow of Franklin,  
 Meredith of Cass,

Springer of Buchanan,  
 Langan of Clinton,  
 Clary of Chickasaw,  
 Teachout of Polk,  
 Greeley of Story  
 Wise of Black Hawk,  
 Kling of Harrison,  
 Robinson of Emmet,  
 Chassell of Plymouth,  
 Hambleton of Mahaska  
 Koontz of Johnson.

## APPROPRIATIONS.

Mattes of Sac,	Hannah of Kossuth,
Robinson of Emmet,	Maben of Hancock,
Flenniken of Clayton,	Boland of Iowa,
Head of Greene,	Stanbery of Cerro Gordo,
Bealer of Linn,	Hume of Mitchell,
Christianson of Hamilton,	Dashiell of Warren,
Leech of Cedar,	Mott of Audubon,
Powers of Floyd,	Hollembeak of Adair,
Chassell of Plymouth,	McCulloch of Wayne,
Wright of Webster,	Gregory of Adams,
Jones of Montgomery,	Morris of Sioux,
Weeks of Guthrie,	Jacobson of Winneshiek,
McElrath of Woodbury,	Meredith of Cass,
Bixby of Delaware,	Epperson of Wappello,
Darrah of Lucas,	Frudden of Dubuque.
Colclo of Carroll,	

## RAILROADS AND COMMERCE.

Wise of Black Hawk,	Conn of Butler,
Cummings of Marshall,	Lister of Grundy,
Bealer of Linn,	Jones of Montgomery,
English of Polk,	Doran of Boone,
Calderwood of Scott,	Skinner of Union,
Christianson of Hamilton,	Hambleton of Mahaska,
Nichols of Muscatine,	McCulloch of Wayne,
Greeley of Story,	McDole Jackson,
Pritchard of Wright,	Kennedy of Lee,
Coburn of Cherokee,	Washburn of Mills,
McNie of Benton,	Mattes of Sac,
Cassel of Jefferson,	Saylor of Bremer,
Weldon of Hardin,	Van Eaton of Lyon,
Weeks of Guthrie,	Wyland of Shelby,
Hart of Allamakee,	Willson of Washington,
Lowrey of Calhoun,	Lundt of Tama,
Martin of Pottawattamie,	DeMar of Davis.

## BANKS AND BANKING.

Head of Greene,	Lowrey of Calhoun,
Greeley of Story,	Croze of Page,
Wise of Black Hawk,	Martin of Pottawattamie,
Teachout of Polk,	Saylor of Bremer,
McClurkin of Louisa,	Epperson of Wapello,
Calderwood of Scott,	Clark of Poweshiek,
Robinson of Emmet,	Koontz of Johnson,
Freeman of Pottawattamie,	Whiting of Monona,
Christianson of Hamilton,	McCreary of Appanoose,
McNie of Benton,	Clary of Chickasaw,
Greene of Madison,	Sankey of Decatur,
Cheney of Clay,	Hakes of Pocahontas,
Jones of Montgomery,	Hanna of Kossuth.
Jepson of Woodbury,	

## INSURANCE.

English of Polk,  
 Temple of Clarke,  
 Kendall of Monroe,  
 Flenniken of Clayton,  
 Bailey of Ringgold,  
 Carden of Henry,  
 Chassell of Plymouth,  
 Robinson of Emmet,  
 Lowrey of Calhoun,  
 Stoltenberg of Scott,  
 Welden of Hardin  
 McElrath of Woodbury,  
 Teter of Marion,

Lister of Grundy,  
 Skinner of Union,  
 Morris of Sioux,  
 Hollembeak of Adair,  
 Boland of Iowa,  
 McCulloch of Wayne,  
 Springer of Buchanan  
 Whiting of Monona,  
 Clary of Chickasaw,  
 Geneva of Keokuk,  
 Ritter of Des Moines,  
 Heles of Dubuque.

## AGRICULTURE.

Pritchard of Wright,  
 Nichols of Muscatine,  
 Bailey of Ringgold,  
 Cassel of Jefferson,  
 McElrath of Woodbury,  
 Robinson of Emmet,  
 Buckingham of Buena Vista,  
 Bixby of Delaware,  
 Hollembeak of Adair,  
 McAllister of Linn,  
 McElrath of Woodbury.  
 Stoltenberg of Scott,  
 Lowrey of Calhoun,  
 Lister of Grundy,  
 Morris of Sioux,  
 Shaffer of Fayette,  
 Boland of Iowa,  
 Lundt of Tama,

Maben of Hancock,  
 Doran of Boone,  
 Cobb of Taylor,  
 Conn of Butler,  
 Offill of Jasper,  
 Washburn of Mills,  
 McDole of Jackson,  
 Jacobson of Winneshiek,  
 Olson of Worth,  
 Spaulding of Howard,  
 Wright of Webster,  
 Cummings of Marshall,  
 Peet of Jones  
 Davie of Crawford,  
 Heles of Dubuque,  
 Laird of Fremont,  
 Willson of Washington.

## SCHOOLS AND TEXT-BOOKS.

Jepson of Woodbury,  
 Leech of Cedar,  
 Powers of Floyd,  
 Stanbery of Cerro Gordo,  
 Bixby of Delaware,  
 McAllister of Linn,  
 Hambleton of Mahaska,  
 Teter of Marion,  
 Dashiell of Warren,  
 Gregory of Adams,  
 Lundt of Tama,

Cruse of Page,  
 Van Eaton of Lyon,  
 Lister of Grundy,  
 Kennedy of Lee,  
 Clark of Poweshiek,  
 Colclo of Carroll,  
 Langan of Clinton,  
 Sankey of Decatur,  
 Heles of Dubuque,  
 Davie of Crawford,  
 DeMar of Davis.

## MINES AND MINING.

Hambleton of Mohaska,  
Kendall of Monroe,  
Offill of Jasper,  
McMurrath of Woodbury,  
Spaulding of Howard,  
Buckingham of Buena Vista,

Carstenson of Clinton,  
Epperson of Wapello,  
McCreary of Appanoose,  
Peet of Jones,  
Ritter of Des Moines,  
Laird of Fremont,  
Davie of Crawford.

## MUNICIPAL CORPORATIONS.

Teachout of Polk,  
Bealer of Linn,  
Carden of Henry,  
Leech of Cedar,  
Nicol of Muscatine,  
McClurkin of Louisa,  
Kling of Harrison,  
Skinner of Union,  
Wright of Webster,  
McAllister of Linn,  
Martin of Pottawattamie,  
Jepson of Woodberry,  
Saylor of Bremer,  
Dow of Franklin,  
Laird of Fremont,

Buckingham of Buena Vista,  
Lister of Grundy,  
McDole of Jackson,  
Darrah of Lucas,  
Meredith of Cass,  
Epperson of Wapello,  
Koontz of Johnson,  
Langan of Clinton,  
Frudden Dubuque,  
Springer of Buchanan,  
Colclo of Carroll,  
McCreary of Appanoose,  
Peet of Jones,  
Ritter of Des Moines,  
Wyland of Shelby.

## TELEGRAPH, TELEPHONE AND EXPRESS.

Coburn of Cherokee,  
Mattes of Sac,  
Greene of Madison,  
Kendall of Monroe,  
Christianson of Hamilton  
Pritchard of Wright,  
Weeks of Guthrie,  
Hart of Allamakee,  
Stoltenberg of Scott,  
Chassell of Plymouth,  
McAllister of Linn,

Teter of Marion,  
Welden of Hardin,  
Martin of Pottawattamie,  
Lowrey of Calhoun,  
Buckingham of Buena Vista,  
Maben of Hancock,  
Morris of Sioux,  
Boland of Iowa,  
Whiting of Monona,  
Clary of Chickasaw.

## PARDONS.

Cummings of Marshall,  
Teachout of Polk,  
Nichols of Muscatine,  
Kling of Harrison,  
Jepson of Woodbury,  
Weeks of Guthrie,  
Hanna of Kossuth,  
Maben of Hancock,  
McCulloch of Wayne,  
Morris of Sioux,

Skinner of Union,  
Hume of Mitchell,  
Dow of Franklin,  
Meredith of Cass,  
Springer of Buchanan,  
Frudden of Dubuque,  
Koontz of Johnson,  
Ritter of Des Moines,  
Wyland of Shelby.

## LABOR.

Calderwood of Scott,  
 Cheney of Clay,  
 Kendall of Monroe,  
 Freeman of Pottawattamie,  
 Bailey of Ringgold,  
 Carstensen of Clinton,  
 Spaulding of Howard,  
 Stoltenberg of Scott,  
 Doran of Boone,

Maben of Hancock,  
 Ofill of Jasper,  
 Washburn of Mills,  
 Saylor of Bremer,  
 Olson of Worth,  
 Whiting of Monona,  
 McCleary of Appanoose,  
 Ritter of Des Moines,  
 Davie of Crawford.

## ELECTIONS.

Flenniken of Clayton,  
 Head of Greene,  
 Greene of Madison,  
 English of Polk,  
 Kling of Harrison,  
 Cummings of Marshall,  
 Greeley of Story,  
 Pritchard of Wright,  
 Freeman of Pottawattamie,

Christianson of Hamilton,  
 Leech of Cedar,  
 Nichols of Muscatine,  
 Mott of Audubon,  
 Langan of Clinton,  
 Clary of Chickasaw,  
 Wyland of Shelby.

## PUBLIC HEALTH.

Leach of Cedar,  
 Dashiell of Warren,  
 Gregory of Adams,  
 McCulloch of Wayne,  
 Summers of Van Buren,  
 Clark of Poweshiek,  
 Flenniken of Clayton,  
 Spaulding of Howard,

Croze of Page,  
 Bixby of Delaware,  
 Mott of Audubon,  
 McDole of Jackson,  
 Clary of Chickasaw,  
 Kling of Harrison,  
 Heles of Dubuque,  
 Peet of Jones.

## ROADS AND HIGHWAYS.

Bailey of Ringgold,  
 Coburn of Cherokee,  
 Cassel of Jefferson,  
 Powers of Floyd,  
 Cheney of Clay,  
 Head of Greene,  
 Christianson of Hamilton,  
 Weeks of Guthrie,  
 Hart of Allamakee,  
 Carstensen of Clinton,  
 McAllister of Linn,  
 Morris of Sioux,  
 Cobb of Taylor,  
 Kennedy of Lee,

Doran of Boone,  
 Conn of Butler,  
 Shaffer of Fayette,  
 Lister of Grundy,  
 Jacobson of Winneshiek,  
 Darrah of Lucas,  
 Colclo of Carroll,  
 Peet of Jones,  
 Geneva of Keokuk,  
 Laird of Fremont,  
 Davie of Crawford,  
 Lundt of Tama,  
 Hakes of Pocahontas,  
 Heles of Dubuque.

## PUBLIC LANDS AND BUILDINGS.

Croze of Page,  
Calderwood of Scott,  
Boland of Iowa,  
Carstensen of Clinton,  
Saylor of Bremer,  
Sankey of Decatur,

Wise of Black Hawk,  
Dashiell of Warren,  
Conn of Butler,  
Shaffer of Fayette,  
Willson of Washington.

## SUPPRESSION OF INTemperance.

Greeley of Story,  
Leech of Cedar  
McClurkin of Louisa,  
Pritchard of Wright,  
Wright of Webster,  
Chassell of Plymouth,  
Jones of Montgomery,  
Stanbery of Cerro Gordo  
Conn of Butler,

Shaffer of Fayette,  
Cobb of Taylor,  
Jacobson of Winneshiek,  
McAllister of Linn,  
Weeks of Guthrie,  
Koontz of Johnson,  
Hakes of Pocahontas,  
Lundt of Tama,  
DeMar of Davis

## CONSTITUTIONAL AMENDMENTS.

Wright of Webster,  
Temple of Clarke,  
Mattes of Sac,  
English of Polk,  
Head of Greene,  
Flenniken of Clayton,  
Kling of Harrison,  
Bealer of Linn,  
Cassel of Jefferson,

Dashiell of Warren,  
Hambleton of Mahaska,  
Lowrey of Calhoun,  
Maben of Hancock,  
Darrah of Lucas,  
Colclo of Carroll,  
Whiting of Monona,  
Springer of Buchanan,  
Langan of Clinton.

## PUBLIC LIBRARIES.

Koontz of Johnson,  
Wise of Black Hawk,  
Temple of Clark,  
Summers of Van Buren,  
Jepson of Woodbury,  
Hollenbeak of Adair,  
Spaulding of Howard,

Boland of Iowa,  
Saylor of Bremer,  
McDole of Jackson,  
McCreary of Appanoose,  
Ritter of Des Moines,  
Sankey of Decatur.

## PRINTING.

Chassell of Plymouth,  
English of Polk,  
Kling of Harrison,  
McNie of Benton,  
Pritchard of Wright,  
Carden of Henry,  
Leach of Cedar,  
Teachout of Polk,  
Coburn of Cherokee,

Mott of Audubon,  
Croze of Page,  
Summers of Van Buren  
Dow of Franklin,  
Gregory of Adams,  
Skinner of Union,  
Colclo of Carroll,  
Springer of Buchanan,  
McClurkin of Louisa.

STATE UNIVERSITY.

Carden of Henry,  
Koontz of Johnson,  
Greene of Madison,  
Christianson of Hamilton  
Spaulding of Howard,  
Gregory of Adams,

Hanna of Kossuth,  
Boland of Iowa,  
Saylor of Bremer,  
Bixby of Delaware,  
Hume of Mitchell,  
Epperson of Wapello,  
Whiting of Monona.

AGRICULTURAL COLLEGE.

McClurkin of Louisa,  
Greeley of Story,  
Bailey of Ringgold,  
Hart of Allamakee,  
Welden of Hardin,  
Martin of Pottawattamie,

Offill of Jasper,  
McCulloch of Wayne,  
Olson of Worth,  
Van Eaton of Lyon,  
Frudden of Dubuque,  
Hakes of Pochontas.

COMPENSATION OF PUBLIC OFFICERS.

Bealer of Linn,  
Calderwood of Scott,  
Freeman of Pottawattamie,  
McDole of Jackson,  
Hume of Mitchell,  
Skinner of Union,  
Hanna of Kossuth,

Cartensen of Clinton,  
Washburn of Mills,  
Summers of Van Buren  
Darrah of Lucas,  
Frudden of Dubuque,  
Laird of Fremont,  
DeMar of Davis.

CLAIMS.

McNie of Benton,  
Cheney of Clay,  
Teter of Marion,  
Washburn of Mills,  
Maben of Hancock,  
Lister of Grundy,

Morris of Sioux,  
Olson of Worth,  
Epperson of Wapello,  
Wyland of Shelby,  
Hakes of Pocahontas,  
Davie of Crawford,  
Willson of Washington,

NORMAL SCHOOLS.

Robinson of Emmet,  
Wise of Black Hawk,  
Mattes of Sac,  
Dow of Franklin,  
Hollenbeak of Adair,  
Skinner of Union,

Shaffer of Fayette,  
Hambleton of Mahaska,  
Conn of Butler,  
Jacobson of Winneshiek,  
Geneva of Keokuk,  
McCreary of Appanoose.

## PRIVATE CORPORATIONS.

Christianson of Hamilton,	Stoltenberg of Scott,
Mattes of Sac,	Dashiell of Warren,
Bailey of Ringgold,	Summers of Van Buren,
Greene of Madison,	Clark of Poweshiek,
McAllister of Linn,	Clary of Chickasaw,
Stanbery of Cerro Gordo,	Geneva of Keokuk.

## DOMESTIC MANUFACTURES.

Powers of Floyd,	Lister of Grundy,
Cheney of Clay,	Kennedy of Lee,
Stoltenberg of Scott,	Washburn of Mills,
Welden of Hardin,	Sankey of Decatur,
Stanbery of Cerro Gordo,	McElrath of Woodbury,
Cartensen of Clinton,	Heles of Dubuque.

## HORTICULTURE.

Hollembeck of Adair,	Kennedy of Lee,
Calderwood of Scott,	Washburn of Mills,
Cassel of Jefferson,	Willson of Washington,
Shaffer of Fayette,	Geneva of Keokuk,
Conn of Butler,	Pest of Jones.

## PHARMACY.

Dashiell of Warren,	McClurkin of Louisa,
Gregory of Adams,	Lowrey of Calhoun,
Nichols of Muscatine,	Doran of Boone,
Kendall of Monroe,	Maben of Hancock,
Coburn of Cherokee,	Buckingham of Buena Vista,
Leech of Cedar,	Morris of Sioux,
Flenniken of Clayton,	McDole of Jackson,
Robinson of Emmet,	Wyland of Shelby.

## BUILDING AND LOAN.

Kling of Harrison,	Lowrey of Calhoun,
Powers of Floyd,	Clark of Peweshiek,
Cassel of Jackson,	Whiting of Monona,
Teter of Marion,	Wyland of Shelby.
Stoltenberg of Scott,	

## FEDERAL RELATIONS.

Weeks of Guthrie,	Jones of Montgomery,
Temple of Clarke,	Mott of Audubon,
Wise of Black Hawk,	Frudden of Dubuque,
Wright of Webster,	Sankey of Decatur.
Croese of Page,	

## WOMAN SUFFRAGE.

Cheney of Clay,	Boland of Iowa,
Coburn of Cherokee,	Cobb of Taylor,
Greene of Madison,	Wyland of Shelby,
Powers of Floyd,	Laird of Fremont,
Nichols of Muscatine,	Heles of Dubuque.
Morris of Sioux,	

## HOSPITAL FOR INSANE.

Springer of Buchanan,	Gregory of Adams,
Carden of Henry,	Doran of Boone,
Coburn of Cherokee,	Hume of Mitchell,
Cröse of Page,	Meredith of Cass,
Christianson of Hamilton,	Frudden of Dubuque.

## INSTITUTE FOR FEEBLE-MINDED.

Washburn of Mills,	McCulloch of Wayne,
Bailey of Ringgold,	Van Eaton of Lyon,
Teter of Marion,	Sankey of Decatur,
Summers of Van Buren,	Wyland of Shelby.

## INSTITUTE FOR DEAF.

Martin of Pottawattamie,	McAllister of Linn,
Powers of Floyd,	Meredith of Cass,
Bealer of Linn,	Geneva of Keokuk,
Wright of Webster,	Van Eaton of Lyon.

## COLLEGE FOR THE BLIND.

Shaffer of Fayette,	Whiting of Monona,
McNie of Benton,	Willson of Washington,
Dow of Franklin,	Laird of Fremont,
Hanna of Kossuth,	Carstensen of Clinton

## INDUSTRIAL SCHOOLS.

Mott of Audubon,	Jones of Montgomery,
Teachout of Polk,	Cobb of Taylor,
Freeman of Pottawattamie,	Langan of Clinton,
Welden of Hardin,	Lundt of Tamä.

## SOLDIERS' AND ORPHANS' HOME.

Nichols of Muscatine,	Offill of Jasper,
Cummings of Marshall,	Olson of Worth,
Calderwood of Scott,	Clary of Chickasaw,
Cobb of Taylor,	Davie of Crawford.

## PENITENTIARIES.

Jones of Montgomery,	Olson of Worth,
Temple of Clarke,	Jacobson of Winneshiek,
Teter of Marion,	Peet of Jones,
Bixby of Delaware,	De Mar of Davis,
Kennedy of Lee,	Offill of Jasper.

## PRIVATE CORPORATIONS.

Christianson of Hamilton,	Stoltenberg of Scott,
Mattes of Sac,	Dashiell of Warren,
Bailey of Ringgold,	Summers of Van Buren,
Greene of Madison,	Clark of Poweshiek,
McAllister of Linn,	Clary of Chickasaw,
Stanbery of Cerro Gordo,	Geneva of Keokuk.

## DOMESTIC MANUFACTURES.

Powers of Floyd,	Lister of Grundy,
Cheney of Clay,	Kennedy of Lee,
Stoltenberg of Scott,	Washburn of Mills,
Welden of Hardin,	Sankey of Decatur,
Stanbery of Cerro Gordo,	McElrath of Woodbury,
Cartensen of Clinton,	Heles of Dubuque.

## HORTICULTURE.

Hollembeck of Adair,	Kennedy of Lee,
Calderwood of Scott,	Washburn of Mills,
Cassel of Jefferson,	Willson of Washington,
Shaffer of Fayette,	Geneva of Keokuk,
Conn of Butler,	Peet of Jones.

## PHARMACY.

Dashiell of Warren,	McClurkin of Louisa,
Gregory of Adams,	Lowrey of Calhoun,
Nichols of Muscatine,	Doran of Boone,
Kendall of Monroe,	Maben of Hancock,
Coburn of Cherokee,	Buckingham of Buena Vista,
Leech of Cedar,	Morris of Sioux,
Flenniken of Clayton,	McDole of Jackson,
Robinson of Emmet,	Wyland of Shelby.

## BUILDING AND LOAN.

Kling of Harrison,	Lowrey of Calhoun,
Powers of Floyd,	Clark of Peweshiek,
Cassel of Jackson,	Whiting of Monona,
Teter of Marion,	Wyland of Shelby.
Stoltenberg of Scott,	

## FEDERAL RELATIONS.

Weeks of Guthrie,	Jones of Montgomery,
Temple of Clarke,	Mott of Audubon,
Wise of Black Hawk,	Frudden of Dubuque,
Wright of Webster,	Sankey of Decatur.
Croze of Page,	

## WOMAN SUFFRAGE.

Cheney of Clay,	Boland of Iowa,
Coburn of Cherokee,	Cobb of Taylor,
Greene of Madison,	Wyland of Shelby,
Powers of Floyd,	Laird of Fremont,
Nichols of Muscatine,	Heles of Dubuque.
Morris of Sioux,	

## HOSPITAL FOR INSANE.

Springer of Buchanan,	Gregory of Adams,
Carden of Henry,	Doran of Boone,
Coburn of Cherokee,	Hume of Mitchell,
Cröse of Page,	Meredith of Cass,
Christianson of Hamilton,	Frudden of Dubuque.

## INSTITUTE FOR FEEBLE-MINDED.

Washburn of Mills,	McCulloch of Wayne,
Bailey of Ringgold,	Van Eaton of Lyon,
Teter of Marion,	Sankey of Decatur,
Summers of Van Buren,	Wyland of Shelby.

## INSTITUTE FOR DEAF.

Martin of Pottawattamie,	McAllister of Linn,
Powers of Floyd,	Meredith of Cass,
Bealer of Linn,	Geneva of Keokuk,
Wright of Webster,	Van Eaton of Lyon.

## COLLEGE FOR THE BLIND.

Shaffer of Fayette,	Whiting of Monona,
McNie of Benton,	Willson of Washington.
Dow of Franklin,	Laird of Fremont,
Hanna of Kossuth,	Carstensen of Clinton

## INDUSTRIAL SCHOOLS.

Mott of Audubon,	Jones of Montgomery,
Teachout of Polk,	Cobb of Taylor,
Freeman of Pottawattamie,	Langan of Clinton,
Welden of Hardin,	Lundt of Tama.

## SOLDIERS' AND ORPHANS' HOME.

Nichols of Muscatine,	Offill of Jasper,
Cummings of Marshall,	Olson of Worth,
Calderwood of Scott,	Clary of Chickasaw,
Cobb of Taylor,	Davie of Crawford.

## PENITENTIARIES.

Jones of Montgomery,	Olson of Worth,
Temple of Clarke,	Jacobson of Winneshiek,
Teter of Marion,	Peet of Jones,
Bixby of Delaware,	De Mar of Davis,
Kennedy of Lee,	Offill of Jasper.

## ANIMAL INDUSTRY.

Doran of Boone,  
Cassel of Jefferson,  
Buckingham of Buena Vista,  
McElrath of Woodbury,  
Lundt of Tama.

Bixby of Delaware,  
Ofill of Jasper,  
Peet of Jones,  
Davie of Crawford

## MILITARY.

Hart of Allamakee,  
Head of Greene,  
Cheney of Clay,  
Greeley of Story,  
Leech of Cedar,  
Bealer of Linn,  
Pritchard of Wright,  
McAllister of Linn.

Dow of Franklin,  
Weldon of Hardin,  
Ofill of Jasper,  
Olson of Worth,  
Cobb of Taylor,  
Sankey of Decatur,  
McCreary of Appanoose.

## POLICE REGULATIONS.

Skinner of Union,  
Teachout of Polk,  
Freeman of Pottawattamie,  
Stanbery of Cerro Gordo,  
McElrath of Woodbury.

McCulloch of Wayne,  
Cartensen of Clinton,  
Koontz of Johnson,  
De Mar of Davis.

## FISH AND GAME.

Hanna of Kossuth,  
Mattes of Sac,  
Coburn of Cherokee,  
Hart of Allamakee,  
McDole of Jackson,  
Jacobson of Winneshiek.

Kennedy of Lee,  
Bixby of Delaware,  
Buckingham of Buena Vista,  
Springer of Buchanan,  
Colclo of Carroll.

## ENROLLED BILLS.

Spaulding of Howard,  
Flenniken of Clayton,  
Calderwood of Scott,  
Carden of Henry,  
Jepson of Woodbury,

Bixby of Delaware.  
Martin of Pottawattamie,  
Frudden of Dubuque,  
Willson of Washington.

## COUNTY AND TOWNSHIP ORGANIZATION.

Cassel of Jefferson,  
McNie of Benton,  
Hollembek of Adair,  
Hanna of Kossuth,  
Kennedy of Lee,

Shaffer of Fayette,  
Conn of Butler,  
Olson of Worth,  
Davie of Crawford,  
Heles of Dubuque.

## PUBLIC CHARITIES.

Freeman of Pottawattamie,  
McNie of Benton,  
Stoltenberg of Scott,  
Saylor of Bremer,  
Hanna of Kossuth,

Hume of Mitchell,  
Summers of Van Buren,  
Hambleton of Mahaska  
Jones of Montgomery.

## SENATORIAL DISTRICTS.

Teter of Marion,  
 Nichols of Muscatine,  
 Mattes of Sac,  
 McElrath of Woodbury,  
 Doran of Boone,  
 Jacobson of Winneshiek,  
 Hakes of Pocahontas,

Clark of Poweshiek,  
 McCulloch of Wayne,  
 Summers of Van Buren,  
 Epperson of Wapello,  
 Colcle of Carroll,  
 Geneva of Keokuk.

## REPRESENTATIVE DISTRICTS.

Maben of Hancock,  
 English of Polk,  
 Flerziken of Clayton,  
 Stanbery of Cerro Gordo,  
 Mott of Audubon,  
 Martin of Pottawattamie,  
 Jepson of Woodbury,  
 Peet of Jones,

Van Eaton of Lyon,  
 Hollembeak of Adair  
 Darrah of Lucas,  
 Whiting of Monona,  
 Ritter of Des Moines,  
 Lundt of Tama,  
 Wyland of Shelby.

## CONGRESSIONAL DISTRICTS.

Greene of Madison,  
 McClurkin of Louisa,  
 Greeley of Story,  
 Welden of Hardin,  
 Wright of Webster,  
 Dashiell of Warren,  
 Chassell of Plymouth,  
 Hart of Allamakee,

Hume of Mitchell,  
 Hanna of Kossuth,  
 Dow of Franklin,  
 Olson of Worth,  
 Jones of Montgomery,  
 McDole of Jackson,  
 McCreary of Appanoose.

## JUDICIAL DISTRICTS.

Kennedy of Lee,  
 Temple of Clarke,  
 Bealer of Linn,  
 Cummings of Marshall,  
 Carden of Henry,  
 Freeman of Pottawattamie,  
 Head of Greene,

McNie of Benton,  
 Gregory of Adams,  
 Offill of Jasper,  
 Laird of Fremont,  
 Meredith of Cass,  
 Willson of Washington.

## ENGROSSED BILLS.

Carstenson of Clinton,  
 English of Polk,  
 Robinson of Emmet,  
 Wise of Black Hawk,

Saylor of Bremer,  
 Langan of Clinton,  
 De Mar of Davis.

## RULES.

Langan of Clinton,  
 Temple of Clarke,  
 Kendall of Monroe,  
 English of Polk,

Chassell of Plymouth,  
 Koontz of Johnson,  
 Springer of Buchanan  
 Mr. Speaker.

## REPRESENTATIVES AND THEIR RESPECTIVE COMMITTEES.

### BAILEY.

Roads and Highways—Chairman, Ways and Means, Private Corporations, Labor,	Insurance, Agriculture, Institute for Feeble Minded, Agricultural College.
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### BEALER.

Compensation of Public Officers— Chairman, Ways and Means, Appropriations, Railroads and Commerce, Municipal Corporations,	Constitutional Amendments, Military, Institute for Deaf, Judicial Districts.
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### BIXBY.

Appropriations, Public Health, State University, Agriculture, Enrolled Bills,	Schools and Text-Books, Animal Industry, Penitentiaries, Fish and Game.
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### BOLAND.

Appropriations, Woman Suffrage, State University, Agriculture, Public Libraries,	Insurance, Public Lands and Buildings, Telegraph, Telephone and Express.
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### BUCKINGHAM.

Ways and Means, Municipal Corporations, Mines and Mining, Pharmacy, Agriculture,	Animal Industry, Telegraph, Telephone and Express, Fish and Game,
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## CALDERWOOD.

Labor—Chairman,  
Railroads and Commerce,  
Banks and Banking,  
Compensation of Public Officers,  
Enrolled Bills,

Public Lands and Buildings,  
Horticulture,  
Soldiers' and Orphans' Home.

## CARDEN.

State University—Chairman,  
Ways and Means,  
Municipal Corporations,  
Printing,

Insurance,  
Enrolled Bills,  
Hospital for Insane,  
Judicial Districts.

## CARSTENSEN.

Engrossed Bills—Chairman  
Domestic Manufactures,  
Roads and Highways,  
Police Regulations,  
College for the Blind,

Public Lands and Buildings,  
Ways and Means,  
Labor,  
Compensation of Public Officers,  
Mines and Mining.

## CASSEL.

County and Township Organiza-  
tion—Chairman,  
Railroads and Commerce,  
Constitutional Amendments,

Agriculture,  
Building and Loan,  
Roads and Highways,  
Animal Industry,  
Horticulture.

## CHASSELL.

Printing—Chairman,  
Judiciary,  
Appropriations,  
Suppression of Intemperance,

Congressional Districts,  
Insurance,  
Telegraph, Telephone and Express,  
Rules.

## CHKNEY.

Woman Suffrage—Chairman,  
Ways and Means,  
Banks and Banking,  
Labor,

Claims,  
Domestic Manufactures,  
Roads and Highways,  
Military.

## CHRISTIANSON.

Private Corporations—Chairman,  
Appropriations,  
Railroads,  
Banks and Banking,  
Elections,

State University,  
Roads and Highways,  
Telegraph, Telephone and Express,  
Hospital for Insane.

## CLARK.

Ways and Means,  
Banks and Banking,  
Schools and Text-Books,

Senatorial Districts,  
Private Corporations,  
Public Health.

## CLARY.

Judiciary,  
Banks and Banking,  
Private Corporations,  
Elections,  
Public Health,

Insurance,  
Telegraph, Telephone and Express,  
Soldier's and Orphans' Home.

## COBB.

Ways and Means,  
Suppression of Intemperance,  
Woman Suffrage,  
Agriculture,

Roads and Highways,  
Industrial Schools,  
Military,  
Soldiers' and Orphans' Home.

## COBURN.

Railroads,  
Hospital for Insane,  
Printing,  
Pharmacy,  
Woman Suffrage,

Road and Highways,  
Telegraph, Telephone and Express,  
Fish and Game,

## COLCLO.

Appropriations,  
Municipal Corporations,  
Printing  
Senatorial Districts,  
Fish and Game,

Constitutional Amendments,  
Schools and Text-Books,  
Roads and Highways.

## CONN.

Railroads and Commerce,  
Suppression of Intemperance,  
Agriculture,  
County and Township Organization,

Roads and Highways,  
Normal Schools,  
Public Lands and Buildings,  
Horticulture.

## CROSE.

Public Lands and Buildings—  
Chairman,  
Ways and Means,  
Printing,  
Banks and Banking,

Public Health,  
Hospital for Insane,  
Schools and Text-Books,  
Federal Relations.

## CUMMINGS.

Pardons—Chairman,  
Ways and Means,  
Judiciary,  
Railroads and Commerce,  
Labor,

Elections,  
Soldiers' and Orphans' Home,  
Fish and Game,  
Judicial Districts.

## DARRAH.

Ways and Means,  
Appropriations,  
Municipal Corporations,  
Roads and Highways,

Compensation of Public Officers,  
Representative Districts,  
Constitutional Amendments,

## DASHIELL.

Pharmacy—Chairman,  
Appropriations,  
Private Corporations  
Congressional Districts,  
Public Lands and Buildings,

Constitutional Amendments,  
Public Health,  
Schools and Text-Books.

## DAVIE.

Labor,  
Schools and Text-Books,  
Claims,  
Mines and Mining,  
Agriculture,

County and Township Organization,  
Roads and Highways,  
Animal Industry,  
Soldiers' and Orphans' Home.

## DEMAR.

Railroads and Commerce,  
Schools and Text-Books,  
Suppression of Intemperance,

Compensation of Public Officers,  
Penitentiaries,  
Police Regulations.

## DORAN.

Animal Industry—Chairman,  
Railroads and Commerce,  
Labor,  
Senatorial Districts,

Pharmacy,  
Agriculture,  
Roads and Highways,  
Hospital for Insane.

## DOW.

Judiciary,  
Municipal Corporations,  
Printing,  
Congressional Districts,

Pardons,  
Normal Schools,  
Military,  
College for the Blind.

## ENGLISH.

Insurance—Chairman,  
Ways and Means,  
Railroads,  
Printing,  
Elections,

Representative Districts,  
Constitutional Amendments,  
Engrossed Bills,  
Rules.

## EPPELSON.

Ways and Means,  
Appropriations,  
Banks and Banking,  
Mines and Mining,  
Municipal Corporations,

Claims,  
Senatorial Districts,  
State University,  
Military.

**FLENNIKEN.**

Elections—Chairman,  
Municipal Corporations,  
Ways and Means,  
Appropriations,  
Representative Districts,  
Public Health,

Pharmacy,  
Insurance,  
Enrolled Bills,  
Constitutional Amendments.

**FREEMAN.**

Public Charities—Chairman,  
Ways and means,  
Labor,  
Compensation of Public Officers,

Elections,  
Banks and Banking,  
Industrial Schools,  
Police Regulations,  
Judicial Districts.

**FRUDDEN.**

Appropriations,  
Municipal Corporations,  
Compensation of Public Officers,  
Pardons,

Enrolled Bills,  
Hospital for Insane,  
Federal Relations,  
Agricultural College.

**GENEVA.**

Ways and Means,  
Private Corporations,  
Senatorial Districts,  
Insurance,

Roads and Highways,  
Normal Schools,  
Horticulture,  
Institute for Deaf.

**GREELEY.**

Suppression of Intemperance, Ch'm.  
Judiciary,  
Railroads and Commerce,  
Banks and Banking,

Elections,  
Congressional Districts,  
Military,  
Agricultural College.

**GREENE.**

Congressional Districts—Chairman,  
Ways and Means,  
Banks and Banking,  
Elections,

Woman Suffrage,  
State University,  
Telegraph, Telephone and Express,  
Private Corporations.

**GREGORY.**

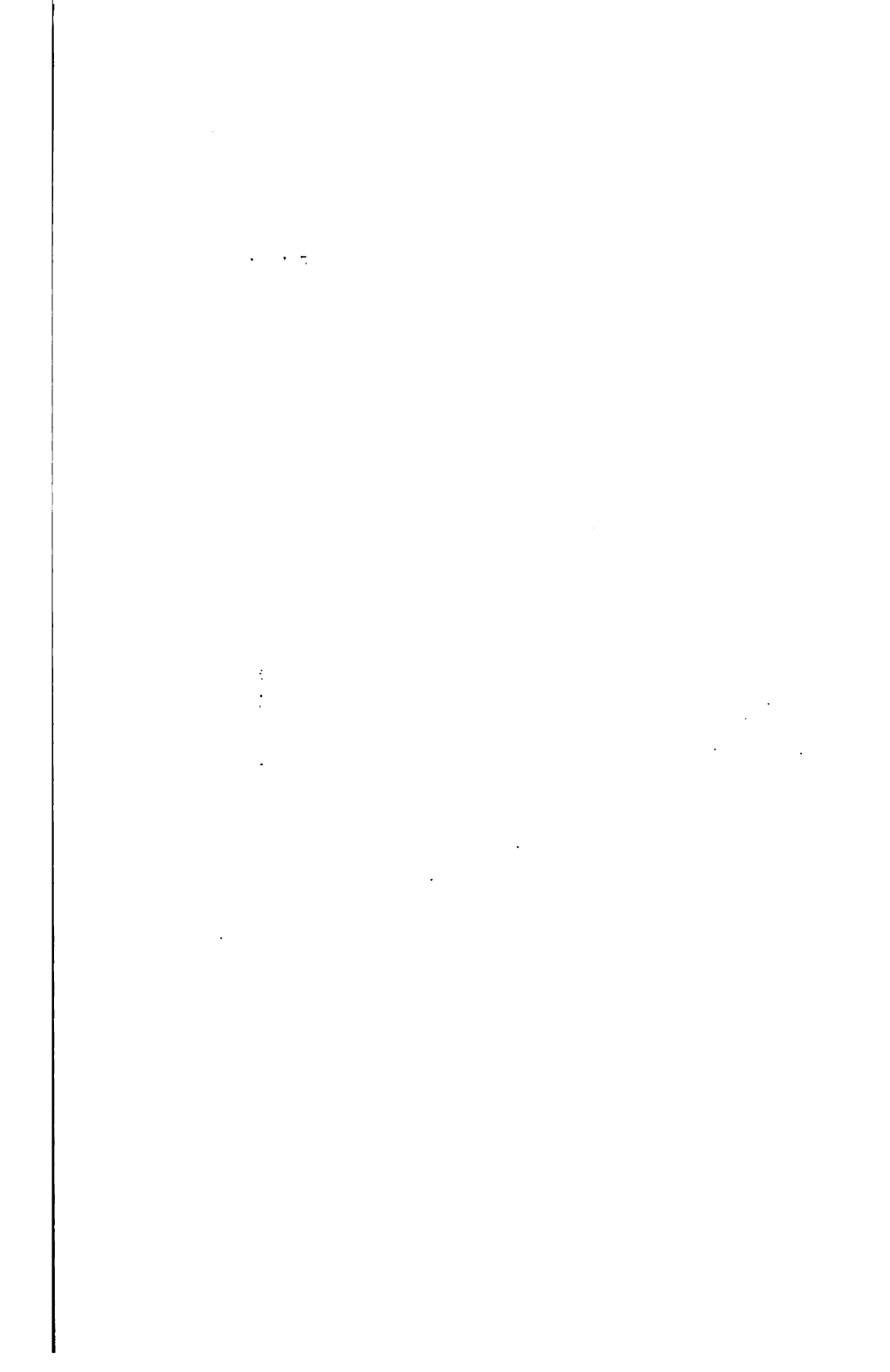
Appropriations,  
Printing,  
Public Health,  
Pharmacy,

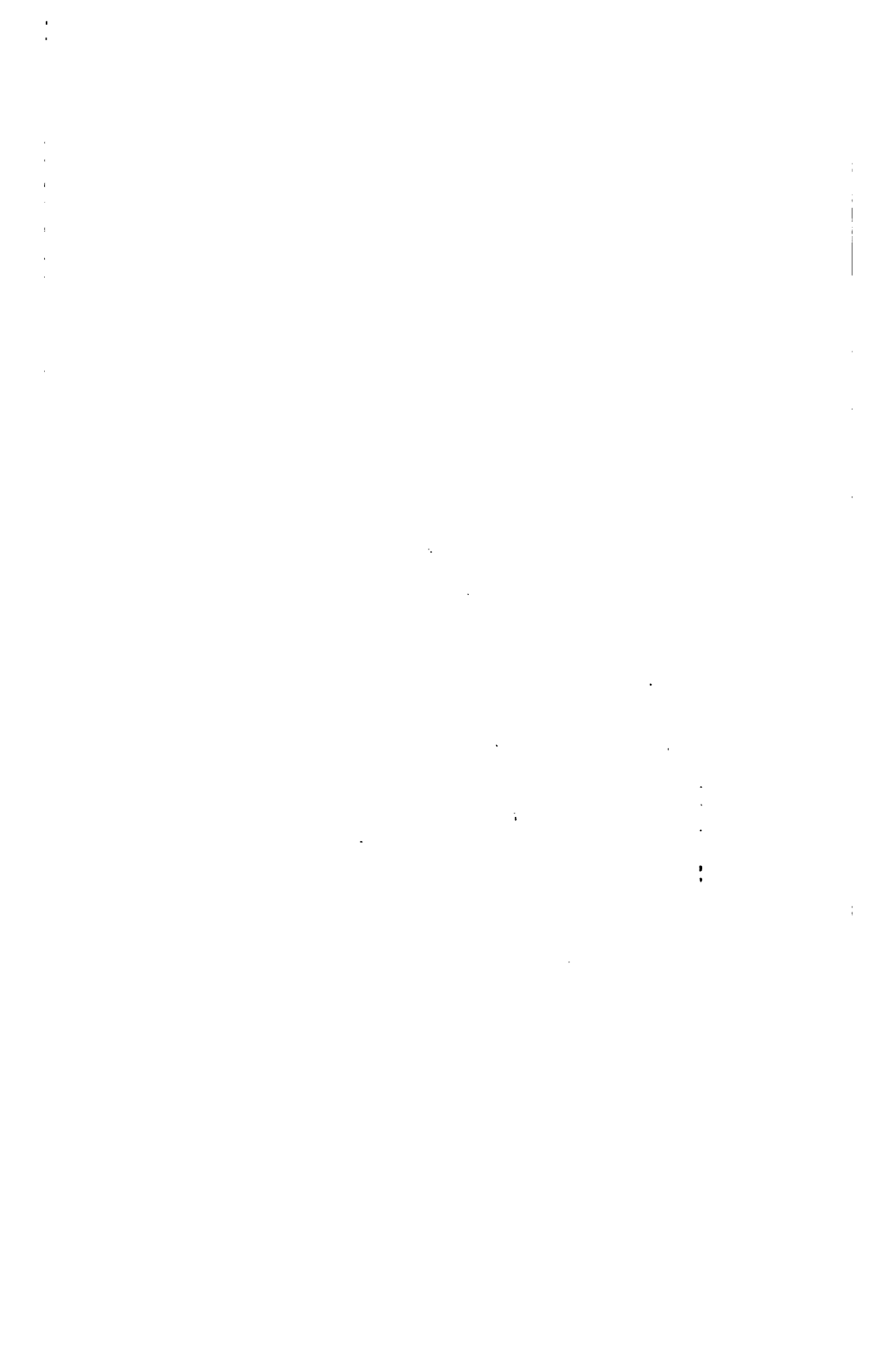
State University,  
Schools and Text-Books,  
Hospital for Insane,  
Judicial Districts.

**HAKES.**

Ways and Means,  
Banks and Banking,  
Claims,  
Suppression of Intemperance,

Senatorial Districts,  
Roads and Highways,  
Normal Schools,  
Agricultural College.





## HAMBLETON.

Judiciary, Railroad and Commerce, Mines and Mining, Schools and Text-Books,	Public Charities, Constitutional Amendments, Normal Schools.
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## HANNA.

Fish and Game—Chairman, Appropriations, Banks and Banking, Compensation of Public Officers, Congressional Districts,	State University, Pardons, Public Charities, College for the Blind.
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## HART.

Military—Chairman, Judiciary, Railroads and Commerce, Congressional Districts,	Roads and Highways, Telegraph, Telephone and Express, Fish and Game, Agricultural College.
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## HEAD.

Banks and Banking—Chairman, Ways and Means, Appropriations, Elections,	Constitutional Amendments, Roads and Highways, Military, Judicial Districts.
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## HELES.

Public Health, Woman Suffrage, Agriculture, Insurance,	Domestic Manufactures, County and Township Organization, Roads and Highways, Schools and Text-Books.
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## HOLLEMBEEK.

Horticulture—Chairman, Appropriations, Representative Districts, Agriculture,	Public Libraries, Insurance, County and Township Organization, Normal Schools.
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## HUME.

Appropriations, Compensation of Public Officers, Congressional Districts, State University,	Pardons, County and Township Organization Public Charities, Hospital for Insane.
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## JACOBSON.

Woman Suffrage, Appropriations, Suppression of Intemperance, Senatorial Districts, Agriculture,	Roads and Highways, Normal Schools, Penitentiaries, Fish and Game.
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## JEPSON.

Schools and Text-Books—Chairman, Judiciary, Municipal Corporations, Banks and Banking,	Representative Districts, Public Libraries, Pardons, Enrolled Bills.
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## JONES.

Penitentiaries—Chairman, Railroads and Commerce, Suppression of Intemperance, Industrial Schools,	Federal Relations, Appropriations, Banks and Banking, Congressional Districts, Public Charities.
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## KENDALL.

Judiciary—Chairman, Mines and Mining, Insurance, Rules, Ways and Means,	Labor, Pharmacy, Telegraph, Telephone and Express.
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## KENNEDY.

Judicial Districts—Chairman, County and Township Organization, Penitentiaries, Fish and Game, Railroads and Commerce,	Domestic Manufactures, Schools and Text-Books, Roads and Highways, Horticulture.
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## KLING.

Building and Loan—Chairman, Public Health, Pardons, Printing, Constitutional Amendments,	Ways and Means, Judiciary, Municipal Corporations, Elections.
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## KOONTZ.

Public Libraries—Chairman, Judiciary, Municipal Corporations, Banks and Banking,	State University, Pardons, Police Regulations, Rules.
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## LAIRD.

Ways and Means, Compensation of Public Officers, Mines and Mining, Woman Suffrage, Agriculture,	Roads and Highways, College for Blind, Judicial Districts, Municipal Corporations.
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## LANGAN.

Rules—Chairman,  
Judiciary,  
Municipal Corporations,  
Elections,

Constitutional Amendments,  
Schools and Text-Books,  
Industrial Schools,  
Engrossed Bills.

## LERCH.

Public Health—Chairman,  
Suppression of Intemperance,  
Elections,  
Schools and Text-Books,  
Appropriations,

Municipal Corporations,  
Printing,  
Pharmacy,  
Military.

## LISTER.

Railroads and Commerce,  
Claims,  
Agriculture,  
Domestic Manufactures,

Roads and Highways,  
Municipal Corporations,  
Insurance,  
Schools and Text-Books.

## LOWREY.

Railroads and Commerce,  
Constitutional Amendments,  
Insurance,  
Telegraph, Telephone and Ex-  
press,

Banks and Banking,  
Pharmacy,  
Agriculture,  
Building and Loan.

## LUNDT.

Railroads and Commerce,  
Representative Districts,  
Schools and Text-Books,  
Suppression of Intemperance,

Animal Industry,  
Agriculture,  
Roads and Highways,  
Industrial Schools.

## MCALLISTER.

Roads and Highways,  
Private Corporations,  
Suppression of Intemperance,  
Agriculture,  
Schools and Text-Books,

Municipal Corporations,  
Military,  
Institute for Deaf,  
Telegraph, Telephone and Express.

## MCCLURKIN.

Agricultural College—Chairman,  
Ways and Means,  
Municipal Corporations,  
Banks and Banking,

Suppression of Intemperance,  
Printing,  
Congressional Districts,  
Pharmacy.

## MC CREARY.

Municipal Corporations,  
Banks and Banking,  
Labor,  
Congressional Districts,

Mines and Mining,  
Public Libraries,  
Normal Schools,  
Military.

**MCCULLOCH.**

Appropriations,  
 Senatorial Districts,  
 Public Health,  
 Pardons,  
 Insurance,

Police Regulations,  
 Institute for Feeble-Minded,  
 Railroads and Commerce,  
 Agricultural College.

**MCDOLE.**

Railroads and Commerce,  
 Municipal Corporations,  
 Compensation of Public Officers,  
 Congressional Districts,

Public Health,  
 Pharmacy,  
 Agriculture,  
 Public Libraries,  
 Fish and Game.

**MCELRAITH.**

Appropriations,  
 Senatorial Districts,  
 Mines and Mining,  
 Agriculture,

Insurance,  
 Domestic Manufactures,  
 Animal Industry,  
 Police Regulations.

**MCNIE.**

Claims—Chairman,  
 Railroads and Commerce,  
 Banks and Banking,  
 Printing,

Public Charities,  
 College for Blind,  
 Judicial Districts,  
 County and Township Organization,

**MABEN.**

Representative Districts—Chairman,  
 Labor,  
 Claims  
 Constitutional Amendments,

Pharmacy,  
 Agriculture,  
 Pardons,  
 Telegraph, Telephone and Express.

**MARTIN.**

Institute for the Deaf—Chairman,  
 Railroads and Commerce,  
 Municipal Corporations,  
 Banks and Banking,

Representative Districts,  
 Telegraph, Telephone and Express,  
 Agricultural College,  
 Enrolled Bills.

**MATTHEWS.**

Appropriations—Chairman,  
 Railroads and Commerce,  
 Private Corporations,  
 Constitutional Amendments,

Senatorial Districts,  
 Normal School,  
 Telegraph, Telephone and Express,  
 Fish and Game.

**MEREDITH.**

Judiciary,  
 Appropriations,  
 Municipal Corporations,  
 Pardons,

Hospital for Insane,  
 Institute for Deaf,  
 Judicial Districts.

## MORRIS.

Appropriations,  
Claims,  
Woman Suffrage,  
Pharmacy,  
Agriculture,

Pardons,  
Insurance,  
Roads and Highways,  
Telegraph, Telephone and Express.

## MOTT.

Industrial Schools—Chairman,  
Ways and Means,  
Appropriations,  
Public Health,

Printing,  
Elections,  
Representative Districts,  
Federal Relations.

## NICHOLS.

Soldiers' and Orphans' Home—  
Chairman,  
Railroads and Commerce,  
Municipal Corporations,  
Elections,

Senatorial Districts,  
Pharmacy,  
Woman Suffrage,  
Agriculture,  
Pardons.

## OFFILL.

Agricultural College,  
Labor,  
Mines and Mining,  
Agriculture,  
Animal Industry,

Penitentiaries,  
Military,  
Soldiers' and Orphans' Home,  
Judicial Districts.

## OLSON.

Labor,  
Claims,  
Congressional Districts,  
Agriculture,  
County and Township Organization,

Penitentiaries,  
Military,  
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Agricultural College.

## PRET.

Municipal Corporations,  
Representative Districts,  
Mines and Mining,  
Public Health,  
Agriculture,

Animal Industry,  
Penitentiaries,  
Horticulture,  
Roads and Highways.

## POWERS.

Domestic Manufactures—Chairman,  
Ways and Means,  
Appropriations,  
Woman Suffrage,

Building and Loan,  
Schools and Text-Books,  
Roads and Highways,  
Institute for Deaf.

## PRITCHARD.

Agriculture—Chairman,  
Ways and Means,  
Railroads and Commerce,  
Suppression of Intemperance,

Printing,  
Elections,  
Telegraph, Telephone and Express.  
Military.

## RITTER.

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Labor,  
Representative Districts,  
Mines and Mining,

Public Libraries,  
Pardons,  
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Insurance.

## ROBINSON.

Normal Schools—Chairman,  
Ways and Means,  
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Banks and Banking,  
Pharmacy,  
Agriculture,  
Engrossed Bills,  
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## SANKEY.

Banks and Banking,  
Public Libraries,  
Domestic Manufactures,  
Schools and Text-Books,  
Public Lands and Buildings,

Military,  
Institute for Feeble-Minded,  
Federal Relations.

## SAYLOR.

Banks and Banking,  
Municipal Corporations,  
Labor,  
Railroads and Commerce,  
State University,  
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Public Charities,  
Engrossed Bills.

## SHAFFER.

College for Blind—Chairman,  
Ways and Means,  
Suppression of Intemperance,  
Agriculture,

County and Township Organization.  
Roads and Highways,  
Normal Schools,  
Public Lands and Buildings,  
Horticulture.

## SKINNER.

Police Regulations—Chairman,  
Railroads and Commerce,  
Municipal Corporations,  
Compensation of Public Officers,

Printing,  
Pardons,  
Insurance,  
Normal Schools.

SPAULDING.

Enrolled Bills—Chairman,	Public Health,
Judiciary,	State University,
Labor,	Agriculture,
Mines and Mining,	Public Libraries.

SPRINGER.

Hospitals for Insane—Chairman,	Constitutional Amendments,
Judiciary,	Pardons.
Municipal Corporations,	Insurance,
Printing,	Fish and Game,
	Rules.

STANBERRY.

Judiciary,	Representative Districts,
Appropriations,	Domestic Manufactures,
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STOLTENBERG.

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Agriculture,	Private Corporations.
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SUMMERS.

Ways and Means,	Public Health,
Printing,	Public Libraries,
Private Corporations,	Public Charities,
Compensation of Public Officers,	Institute for Feeble-Minded.
Senatorial Districts,	

TEACHOUT.

Mines and Mining—Chairman,	Pardons,
Judiciary,	Industrial Schools,
Municipal Corporations,	Police Regulations,
Banks and Banking,	Printing.

TEMPLE.

Ways and Means—Chairman,	Public Libraries,
Judiciary,	Penitentiaries,
Insurance,	Federal Relations,
Constitutional Amendments,	Judicial Districts,
	Rules.

## TETER.

Senatorial Districts—Chairman,  
Judiciary,  
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Insurance,  
Schools and Text-Books,

Penitentiaries,  
Telegraph, Telephone and Express,  
Institute for Feeble-Minded,  
Building and Loan.

## VAN EATON.

Ways and Means,  
Representative Districts,  
Schools and Text-Books,  
Institution for Feeble-Minded.

Agricultural College,  
Railroads and Commerce,  
Military.

## WASHBURN.

Institute for Feeble-Minded—Chair-  
man,  
Horticulture,  
Labor,  
Claims,

Compensation of Public Officers,  
Agriculture,  
Domestic Manufactures,  
Railroads and Commerce.

## WEEKS.

Federal Relations—Chairman,  
Judiciary,  
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Pardons,  
Roads and Highways,  
Telegraph, Telephone and Express.

## WELDEN.

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## WHITING.

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Banks and Banking,  
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College for the Blind.

## WHITMER.

Appropriations,  
Banks and Banking,  
Claims,  
State University,  
Roads and Highways,

Public Charities,  
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## WILLSON.

Railroads and Commerce,  
Claims,  
Agriculture,  
Enrolled Bills,

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Horticulture,  
College for the Blind,  
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## WISE.

Railroads and Commerce—Chair-  
man,  
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Banks and Banking,  
Public Libraries,

Normal Schools,  
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Public Lands and Buildings.

## WRIGHT.

Constitutional Amendments—Chair-  
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Judiciary,  
Appropriations,  
Municipal Corporations,

Suppression of Intemperance,  
Congressional Districts,  
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Institute for Deaf.

## WYLAND.

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Municipal Corporations,  
Elections,  
Representative Districts,  
Pharmacy,  
Woman Suffrage,

Pardons,  
Buildings and Loan,  
Institute for Feeble-Minded,  
Claims.

## MR. SPEAKER.

Rules.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>Room 1—</b>						
Ways and Means.....		2 p. m.		2 p. m.		
Judiciary.....	2 p. m.		2 p. m.		3 p. m.	
Agriculture.....			4 p. m.			2 p. m.
Railroads and Commerce.....		3 p. m.		3 p. m.		
Printing.....		4 p. m.				4 p. m.
<b>Room 6—</b>						
Roads and Highways.....		4 p. m.		2 p. m.		
Mines and Mining.....	2 p. m.					2 p. m.
Animal Industry.....		2 p. m.				
Judicial Districts.....	3 p. m.	2 p. m.		3 p. m.		
Hospital for Insane.....			2 p. m.		4 p. m.	
Public Charities.....			4 p. m.		2 p. m.	
<b>Room 8—</b>						
Elections.....				4 p. m.		2 p. m.
Schools and Text-Books.....		2 p. m.		2 p. m.		
Suppression of Intemperance.....		4 p. m.			4 p. m.	
Insurance.....	3 p. m.		3 p. m.			
<b>Room 10—</b>						
Congressional Districts.....		2 p. m.		2 p. m.		
Penitentiaries.....			2 p. m.			2 p. m.
Engrossed Bills.....	2 p. m.				2 p. m.	
Pardons.....		3 p. m.		3 p. m.		
State University.....	4 p. m.			4 p. m.		
Institute for Feeble-Minded.....			4 p. m.			4 p. m.
<b>Room 11—</b>						
Pharmacy.....		2 p. m.			4 p. m.	
Appropriations.....			2 p. m.	2 p. m.	2 p. m.	
Normal Schools.....	4 p. m.			4 p. m.		
College for the Blind.....			4 p. m.			2 p. m.
Institute for Deaf.....	2 p. m.					4 p. m.
<b>Room 2—</b>						
Constitutional Amendments.....		4 p. m.			4 p. m.	
Woman Suffrage.....			4 p. m.	4 p. m.		
Retrenchment and Reform.....			2 p. m.			2 p. m.
Military.....	2 p. m.			2 p. m.		
Enrolled Bills.....		3 p. m.			3 p. m.	
<b>Room 12—</b>						
Representative Districts.....	2 p. m.				2 p. m.	
Domestic Manufactures.....	3 p. m.				3 p. m.	
County and Twp. Organization.....		4 p. m.		4 p. m.		
Telegraph, Telephone and Ex.....			3 p. m.	3 p. m.		
<b>Room 13—</b>						
Industrial Schools.....		3 p. m.		3 p. m.		
Senatorial Districts.....	4 p. m.			4 p. m.		
Horticultural.....		2 p. m.			2 p. m.	
Agricultural College.....			2 p. m.			
<b>Room 14—</b>						
Soldiers' and Orphans' Home.....	2 p. m.			3 p. m.		
Federal Relations.....		2 p. m.			2 p. m.	
Fish and Game.....		3 p. m.			3 p. m.	
Police Regulations.....	3 p. m.			3 p. m.		
Claims.....			2 p. m.			2 p. m.
<b>SPEAKER'S ROOM—</b>						
Committee on Rules.....						
<b>Room 7—</b>						
Labor.....		4 p. m.			4 p. m.	
Public Lands and Buildings.....	2 p. m.			2 p. m.		
Public Libraries.....			2 p. m.			
Building and Loan.....			4 p. m.		2 p. m.	
<b>Room 15—</b>						
Public Health.....			2 p. m.			2 p. m.
Banks and Banking.....		2 p. m.		2 p. m.		
Municipal Corporations.....		4 p. m.		4 p. m.		
Compensation of Pub. Officers.....	4 p. m.				4 p. m.	
Private Corporations.....			4 p. m.			4 p. m.

Room 5—Chief Clerk. Room 4—Journal Clerk. Room 3—File Clerk.

Room 2—Enrolling Clerk. Room 27—Newspaper Reporters.

# BIENNIAL REPORT

OF

# Inspectors of Oils

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1903 - 1905

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COMPILED BY

W. B. MARTIN, Secretary of State.

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

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DES MOINES  
BERNARD MURPHY STATE PRINTER  
1905



## LETTER OF TRANSMITTAL.

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*To His Excellency, the Honorable Albert B. Cummins, Governor of Iowa.*

DEAR SIR—In accordance with the provisions of Chapter 87, Acts of the Thirtieth General Assembly, I have the honor to transmit herewith a report of the inspections, receipts and expenditures made by the oil inspectors during the biennial period ending June 30, 1905.

The laws relating to the inspection of oils was thoroughly revised by the Thirtieth General Assembly by the enactment of a substitute for Chapter 2, Title XII, in substantially the form and in accordance with the recommendations made in my last biennial report, and the wisdom of this course has been demonstrated by the increased efficiency of the service, and a very material reduction in the cost of the service and a substantial increase in profit to the State.

The number of barrels of oil rejected was 897, as compared with 1,695 barrels for the former period.

The amount of increase in inspection was 14,551 barrels of oil and 26,936 barrels of gasoline, with an increase of fees in the sum of \$4,174.54 over that of the former period, and a decrease of \$1,046.02 in expenses. In other words, it has cost the State \$1,046.02 less to do \$4,174.54 worth more business during the period covered by this report than for the preceding period. This report will also show a net gain to the State of \$5,254.84.

For the biennial period ending June 30, 1903, the cost of the service was 61 47-100 per cent of the total amount of the fees received, and for the period ending June 30, 1905, it was 57 49-100 per cent, while the per cent of profit to the State was 35 73-100 per cent for the former and 39 32-100 per cent for the latter.

The present law went into effect on July 4, 1904, hence the last one-half only of this biennial period is under its operation.

One of the distinctive features of the new law was the pro-

visions made for the appointment of an inspector in chief, clothed with supervisory powers in the matter of inspections and authority to determine all questions in dispute, which has unquestionably resulted in increased efficiency in that branch of the service.

Additional authority was also conferred upon the secretary of state, thus enabling this department to secure additional and better reports, permitting of the inauguration of a system of checking not possible under the old law.

A wise provision and one that can not be too highly commended is the requirement that all fees collected shall be paid to the state, and, that all claims against the state for services rendered and for expenses incurred shall be audited by the Executive Council in the same manner as other claims against the state.

The requirements of the statutes relative to reports from oil companies, though attended with some confusion in the early stages of its operation, has been freely complied with as soon as thoroughly understood, and but little cause for complaint on this score now remains.

In the matter of accidents from the use of illuminating oils or the improper handling of gasoline, I have but little to report.

No written report has been made to this department of any serious accident to life or property from these causes, and but one case of loss of life has come to my notice, and that through the public press and by oral statements, and it appears the evidence in the case is so conflicting that only a court of competent jurisdiction can fix the responsibility, but from the best obtainable information it is clear that no blame can attach to the inspection service or anyone connected therewith.

All inspectors are now using regular mileage, interchangeable mileage, or credentials, which is charged to the state in their reports at two cents per mile, or, the rebate coupons turned over to the state for collection, so that with a very few exceptions, the fare is on a two-cent basis, but as I have no data at hand I am unable to report the amount of saving from this source.

Respectfully,

W. B. MARTIN,

*Secretary of State.*

## CHAPTER 87.

## INSPECTION OF PETROLEUM PRODUCTS.

S. F. 76.

AN ACT to repeal the law as it appears in chapter eleven (11), title twelve (12), of the code and the law as it appears in sections two thousand five hundred and three (2503), two thousand five hundred and eight (2508) and two thousand five hundred and eight-a (2508-a), of the supplement to the code, relating to the inspection of petroleum products and enacting a substitute therefor.

*Be it Enacted by the General Assembly of the State of Iowa:*

**Section 1—Inspectors—Chief Inspector.** The Governor shall appoint inspectors of products of petroleum, not exceeding fourteen in number, one of whom shall be designated as chief inspector, who shall have general supervision of the inspection service of the State, except in the matter of making reports and the payment and receipt of fees. All differences arising in the inspection of oils shall be referred to the chief inspector and his decision of the question shall be final. The chief inspector shall make such recommendations to the State Board of Health as may be deemed necessary to improve the inspection service. He shall devote his time and service wholly to the inspection of oil and the duties of his office. Inspectors may appoint such deputies, helpers and branders as may be necessary in the proper discharge of their official duties, but such appointments before becoming effective must be submitted to, approved and confirmed, and their compensation fixed by the Executive Council as in their judgment may be necessary, equitable and just. Each inspector shall be a resident of the State, and not interested directly or indirectly in the manufacture or sale of products of petroleum. His term of office shall begin on the first day of July in each even numbered year. He shall give bond to the State in the penal sum of five thousand dollars, conditioned upon the faithful performance of his duties, with sureties who shall, in addition to the usual justification, make oath, entered on the bond, that they are not directly or indirectly interested in the manufacture or sale of products of petroleum for illuminating purposes, which bond shall be for the benefit of all persons injured through the failure of the inspector to perform his duties, and shall be filed with, and the sureties thereon approved by, the Secretary of State.

**Sec. 2—Regulations.** The State Board of Health shall make rules and regulations for the inspection of petroleum products, for the government of inspectors, and prescribe the instruments and apparatus to be used. Such rules and regulations shall be approved by the Governor, and, when so approved, shall be binding upon all inspectors.

**Sec. 3. Inspection—branding—fees—supplies.** Each inspector shall be furnished, at reasonable expense to the State, with the necessary supplies,

instruments and apparatus for testing, and shall promptly make inspection, and test and brand all illuminating oils kept for sale, and for such purpose may enter upon the premises of any person. He shall reject all oils for illuminating purposes which will omit a combustible vapor at a temperature of 105 degrees, standard Fahrenheit thermometer, closed test, not less than one-half pint of oil to be used in the flash test. If upon test and examination the oil shall meet the requirements, he shall brand over his official signature and date the barrel or package holding the same, "Approved, Flash Test ..... Degrees," inserting in the blank the number. Should it fail to meet the requirements, it shall be branded under his official signature and date, "Rejected for Illuminating Purposes." All inspections shall be made within the State, and paid for by the person for whom the inspection is made, at the rate of ten cents per barrel, fifty-five gallons for this purpose constituting a barrel, which charge shall be a lien upon the oil inspected, and be collected by the inspector, reported and paid to the Secretary of State, on or before the fifteenth day of each month. For the purposes of this act, gasoline, benzine and naphtha shall be deemed illuminating oil. No gasoline shall be sold, given away or delivered to any person in this State until the package, cask, barrel or vessel containing the same has been plainly marked "gasoline" in such manner as the Executive Council may prescribe. There shall be no refund nor rebate of charges made or paid for inspection except upon a duly verified certificate of the owner that the goods, for which such rebate is asked, have been disposed of outside of the State. Said certificate to be in such form as shall be prescribed by the Secretary of State and shall be delivered to the inspector and attached to his monthly report. The expense of inspection shall be deducted from any rebate or refund so granted. Any person, firm, corporation or agent violating any of the provisions of this act shall be deemed guilty of a misdemeanor and punished accordingly. All necessary supplies, labels, instruments and apparatus as contemplated in this chapter, shall be purchased by the Executive Council, and shall be furnished to inspectors as needed by them, upon requisition therefor, made to the chief inspector, approved by him and forwarded to the Executive Council. Every person who receives products of petroleum for sale which have not been inspected as provided in this chapter, shall, within five days after the receipt thereof, notify the inspector of that inspection district that the same is in his possession; and to neglect so to do shall be deemed a misdemeanor.

**Sec. 4. Record and report—reports from companies, agents, etc.** Each inspector shall keep an accurate record of all oils inspected and branded, the number of gallons, the number and kind of barrels or packages, the date and number of gallons approved, the number rejected, the name of the person for whom inspection was made, and the amount of money received therefor, the necessary traveling expenses incurred, and the expenses incurred in prosecution, which record at all reasonable times shall be open to public inspection. A copy of this record duly verified under oath for the preceding month shall be filed with the Secretary of State on or before the fifteenth day of each month, who shall examine said report and if found correct endorse his approval thereon, and certify the same to the Executive Council, and when approved by said council, the Auditor of State shall issue his warrant upon the Treasurer of State for the amount so approved and

due the several inspectors, and no item of expense shall be allowed and paid not shown in such reports. It shall be the duty of all persons, firms or corporations, officers or agents thereof within the State, receiving any of the products of petroleum subject to inspection, to file with the Secretary of State on or before the tenth day of each month, a certificate duly verified, in such form as shall be approved by the Secretary of State, to cover the month preceding the one in which said report is made. Such reports shall show the number of tanks or barrels, and if in tanks the tank number, of each product inspected for such person, firm, corporation, officer or agent, the amount of fees paid for such inspection, to whom paid, and, that the amounts so stated are all the products received by him or them which are subject to inspection during such period. For any failure to make the reports contemplated in this section the person, firm, corporation, officer, agent or employee shall be liable to a fine of not less than ten dollars nor more than one hundred dollars.

**Sec. 5. Compensation of Inspectors—Expenses.** Each inspector shall be allowed as full compensation for his services all fees and commissions earned and collected by him up to fifty dollars per month, and twenty-five per cent of any sum collected in any one month in excess of fifty dollars, but in no case shall his compensation exceed one hundred dollars per month, except that the chief inspector shall be allowed twenty-five per cent of any sum collected by him in any one month in excess of fifty dollars, up to and not exceeding one hundred and fifty dollars. Inspectors shall also be allowed such other sums necessarily and actually expended in the discharge of their official duties; and for necessary expenses incurred for prosecution of violation of the provisions of this chapter, and for necessary help in branding barrels. All money collected each month by inspectors, shall, on or before the fifteenth day of the following month, be paid to the Secretary of State, and by him accounted for as other fees of his office.

**Sec. 6. Penalties—damages.** If any person, company or corporation, or agent thereof, shall sell, or attempt to sell, any product of petroleum for illuminating purposes which has not been inspected and branded as in this chapter provided, or shall falsely brand any barrel or package containing such petroleum product, or shall refill with products of petroleum barrels or packages having the inspector's brand thereon, without erasing such brand and having the contents thereof inspected, and the barrel or package rebranded, or shall purchase, sell or dispose of any empty barrel or package without thoroughly removing the inspection brand, or shall knowingly or negligently sell, or cause to be sold, or shall use or cause to be used, any product of petroleum mentioned in this chapter not inspected and tested, except as otherwise authorized herein; or if any person shall adulterate with any substance for the purpose of sale or use any product of petroleum to be used for illuminating purposes in such a manner as to render it dangerous, or shall sell or offer for sale, or use any product of petroleum for illuminating purposes which will emit a combustible vapor at a temperature of less than 105 degrees, standard Fahrenheit thermometer, closed test, except as otherwise provided in this section for illuminating railway cars, boats and public conveyances, and except when the oils from which said gas or vapor is generated in closed reservoirs outside the building to be lighted thereby, and except the lighter products of petroleum when used in such lamps or appa-

ratus which, having been submitted to the State Board of Health and having been examined and tested by said board shall be found to be safe for the use of the public and for street light by street lamps, shall be fined not less than ten dollars nor more than fifty dollars, or if any common carrier shall carry in any railway passenger, baggage, mail, or express car, street railway car, boat, stage coach, omnibus, or other means of public conveyance, or use or burn therein any oil or fluid, whether composed wholly or in part of petroleum or its products, which will ignite and burn at a temperature of 300 degrees Fahrenheit thermometer, open test, for lighting any lamp, vessel, or fixture of any kind, or boat or street railway car, stage coach or other means of public conveyance; or if any inspector shall falsely brand any package or barrel, or shall practice any fraud or deceit in office, or be guilty of any official misconduct or culpable negligence to the injury of another, or shall deal or have any pecuniary interest, directly or indirectly in any oils or fluids sold for illuminating purposes while holding such office, he or such person, company, corporation or agent shall be fined not less than fifty dollars and shall be liable in a civil action for all damages which may be sustained on account thereof, and each such inspector shall be fined in a sum not less than ten dollars nor more than one thousand dollars, or imprisoned in the county jail not exceeding six months, or be punished by both fine and imprisonment.

**Sec. 7. Examination of lamps and apparatus.** The State Board of Health shall examine the particular design, mechanism, and workmanship of such lamps or apparatus as shall be presented to such board, and test said lamps or apparatus, and, if it shall find any lamp or apparatus to be safe, said board shall enter the findings of the board upon the records of the proceedings of said board. The board shall have power, in case it comes to the notice of the board that any lamp or apparatus which it has heretofore approved as safe, because either of change of design, the use of unsuitable material, or poor workmanship in the construction of such lamps or apparatus, or for any other cause, is unsafe as then manufactured, and dangerous to public safety to cancel its approval of such lamp or apparatus, and after such cancellation of the approval of said lamp or apparatus, it shall be unlawful to sell or use the same, and no lamps or apparatus manufactured or sold after such disapproval shall be used in burning the lighter products of petroleum for illuminating purposes. The State Board of Health shall notify by registered letter the several inspectors of any approval or disapproval by them of any lamp or apparatus submitted to them for examination.

**Sec. 8. Removal of inspectors.** It shall be the duty of the Governor to remove from office any inspector who is incompetent or unfaithful in the discharge of his official duty, or, having knowledge of the violation of any of the provisions of this chapter, shall neglect or refuse to prosecute the offender. In July of each year each inspector shall file with the secretary of of the Executive Council an inventory of all instruments and apparatus belonging to the State, in his possession, or that of his deputy or helper, which shall be fully accounted for in such manner as may be prescribed by the Executive Council.

**Sec. 9. Biennial report.** The Secretary of State shall make and deliver to the Governor a report, for the fiscal year ending on the thirtieth day

of June in each odd numbered year, of all inspections made, the receipts and expenditures therefor, and such other items as are by this chapter required to be made of record.

Sec. 10. **Repealed.** The law as it appears in chapter eleven (11), title twelve (12), of the code and the law as it appears in sections two thousand five hundred and three (2503), two thousand five hundred and eight (2508) and two thousand five hundred and eight-a (2508-a), of the supplement to the code, relating to the inspection of petroleum products, are hereby repealed and the foregoing enacted in lieu thereof.

Approved April 6, A. D. 1904.

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## REVISED CIRCULAR No. 6, STATE BOARD OF HEALTH.

### INSPECTION OF ILLUMINATING OILS AND LINSEED OIL.

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#### RULES AND REGULATIONS.

##### KEROSENE OIL.

**RULE 1. *The instruments.***—The instrument to be used in testing oil under the provisions of Chapter 87, Section 2, Laws Thirtieth General Assembly, shall be that made by Eimer & Amend, New York, and shall have inscribed thereon the words: "Oil Tester, Iowa State Board of Health," and shall be constructed as follows:

It consists of a sheet copper stand,  $8\frac{1}{4}$  inches high exclusive of the base, and  $4\frac{1}{4}$  inches in diameter. On one side is an aperture  $3\frac{1}{4}$  inches high for introducing a small spirit lamp, or better, a small gas burner, instead of a lamp, when gas is available.

The water bath is also of copper,  $4\frac{1}{4}$  inches in height and 4 inches in diameter inside, provided with a flanged cover; the opening in the cover  $2\frac{1}{4}$  inches in diameter. The flange which supports the bath in the cylindrical stand, is one-fourth inch projection. The capacity of the bath is about 20 fluid ounces, which is indicated by a mark on the inside.

The oil cup is also of copper. The section below the flange is  $3\frac{3}{8}$  inches high and  $2\frac{1}{4}$  inches in diameter. The section above the flange is 1 inch high and  $3\frac{3}{8}$  inches in diameter, and serves as the vapor chamber. A small flange at the upper rim serves to hold the cover, which is of glass, in place.

To prevent reflection from the otherwise bright surface of the metal, the inside is blackened by forming a sulphide of ammonia. The capacity of the oil cup is about ten fluid ounces, when filled to within one-eighth of an inch of the flange which joins the oil-cup and the vapor chamber.

The cover of the oil cup is of glass, three and five-eighths inches in diameter; is perforated on one side with a circular opening, which is filled

with a cork, through which passes the thermometer. On the rim is another oval opening three-fourths of an inch deep, and the same in width, through which is to be passed the flashing jet in testing. The glass cover is used instead of metal that the operator may more readily note the exact point at which the flash occurs. A small gas jet one-fourth of an inch in length is best for igniting the vapor. Where gas can not be had, and to prevent the frequent discrepancy in tests made by different inspectors of the same oil at different places, owing largely, if not entirely, to the difference in their torches, and to obviate the frequent annoyance from that fact, and from smoke from waxed threads filling the vapor chamber of the cup, thereby preventing an accurate and reliable test, a portable gas torch has been devised, which inspectors in this state are required to procure and use for testing products of petroleum.

#### THE FLASH TEST.

**RULE 2.** The test shall be made as follows :

Remove the oil-cup and fill the water-bath with cold water to the mark on the inside. Place the oil-cup in the water-bath, and fill it with oil to within one-eighth of an inch of the flange. Care must be taken that oil does not flow over the flange. Remove all air bubbles with a piece of blotting paper. Place the glass cover on the oil-cup and adjust the thermometer so that its bulb shall be entirely covered by the oil.

Apply the apparatus for heating the water-bath, and so adjust the flame that the degree of heating will *not exceed* two degrees per minute.

When the temperature of the oil has reached ninety degrees Fahrenheit, the test should commence by inserting the torch, which should have a very small flame, into the oval opening in the glass cover, passing it in at such an angle as to have the flame about three-eighths of an inch above the oil, and reaching near the center of the vapor chamber.

The motion must be steady and uniform, rapid, and without any pause. This must be repeated at every two degrees' rise in the thermometer until one hundred degrees is reached, when the torch must be applied at each degree of temperature until one hundred and five degrees is reached. Great care must be exercised to secure accuracy at this point, and to this end the torch must be applied just before the temperature reaches the one hundred and five degree point. If no flash is shown at this point continue the test at each two degrees' rise until the flashing point is reached, which is indicated by the appearance of a slight bluish flame *ON THE SURFACE OF THE OIL*. The *lowest point at which this vapor flame appears on the surface of the oil*, and a perceptible flash is produced, is to be designated as the flashing point. The temperature of the oil must be noted before the torch is applied. The flame of the torch must not touch the oil or come within three-eighths of an inch of its surface. Oil that flashes at one hundred and five degrees, or below that, must be rejected. (Section 3-Chapter 87-30th G. A.)

As cold oil will expand by heating, care must be taken that it does not rise so as to flow over or on the flange or shoulder of the oil cup. That part of the oil cup comprising the vapor chamber and the flange must be dry and entirely free from oil. All air bubbles must be removed from the surface of the oil; this can be done with ordinary blotting paper. The water-bath cup must be filled with cold water for each separate test, and the oil in the

cup brought to a temperature of sixty to sixty-five degrees before the lamp is placed under the water-bath. The oil cup must be carefully and thoroughly wiped dry of oil from the previous test. The flame of the torch must not exceed one-eighth of an inch in length or size.

#### FOR TESTING THREE HUNDRED DEGREES.

**RULE 3.** The instrument to be used for testing oils which come under the provisions of section 6, Chapter 87, Laws 30th General Assembly shall consist of the cylinder, the copper oil cup, the copper collar, for suspending the oil cup in the cylinder, and an adjustable wire support for suspending the thermometer in the oil.

**RULE 4.** To ascertain the igniting and burning point the test should be made as follows:

Fill the cup with the oil to be tested to within three-eighths of an inch of the flange joining the cup and the vapor chamber above. Care must be taken that oil does not flow over the flange, by expansion from heating. Place the cup in the cylinder, covered with the collar. Adjust the wire support so that the thermometer bulb, when supported thereon, will be just covered by the oil, the bulb also being near the center of the cup. Place the lamp or gas jet under the cup. Adjust the flame so that the degree of heating will not exceed ten degrees each minute until two hundred and fifty degrees Fahrenheit is reached, when the rate must not exceed five degrees a minute above that point. The torch to be used must be the same as described in rule one, for obtaining the flash-point. Apply the torch lightly across and not less than three-eighths of an inch above the surface of the oil at each five degrees rise in the temperature, until the oil ignites and burns. The lowest point at which the oil will ignite and burn is to be taken as the burning point, and no oil which burns at a temperature below three hundred and one degrees Fahrenheit must be approved for the purposes set forth in section 6, chapter 87, Laws Thirtieth General Assembly. When approved, the package, cask, barrel, or vessel, containing the oil from which the oil tested was taken, must be branded with stencil number three, as provided in said section and rule eight. The actual point at which the oil burns must be branded on the barrel. If it burns at three hundred and one degrees, or below that, it must be rejected. In this test the water-bath cup and the glass cover are not used, the flame of the lamp being applied directly to the bottom of the oil cup.

#### GENERAL RULES

**RULE 5.** All instruments, testers, and thermometers to be used by inspectors must be approved by, and registered in, the office of the State Board of Health.

**RULE 6.** Inspectors must have all previous brands of tests removed from packages, casks, or barrels before affixing their brand thereon.

**RULE 7.** Brand number one must be circular in form, not less than eight inches in diameter, outside measurement, with ample margin to protect the vessel or barrel from the stencil brush, and must contain the following words: "Approved, flash test . . . . . degrees, Iowa." And also the name of the inspector, date of inspection, and degree of test. It must also be arranged for adjustable dates, and the degrees of test.

**RULE 8.** Brand number two shall be square in form, not less than seven inches outside measurement, without date, and must contain the following words: "Rejected for illuminating purposes....., inspector, Iowa." It must contain the name of the inspector; it must be affixed to all packages, casks, cans, barrels, or vessels containing kerosene which does not flash at a point above 105 degrees Fahrenheit. It must also be affixed to all packages, casks, barrels, or vessels containing gasoline, naphtha, or benzine.

Brand number three shall be of like form and dimensions as brand number one, and shall contain the words: "For illuminating cars, approved (or rejected as the case may be).....degrees, Iowa,..... 190..... Inspector." It shall have adjustable spaces for dates, degrees, and the words "approved" and "rejected." It must also contain the name of the inspector. No oil must be approved for illuminating cars that burns at a temperature below 301 degrees Fahrenheit.

Stencil brands must conform to patterns, on file in the office of the Secretary of the State Board of Health.

**RULE 9.** The inspector's brand must be placed on the package, cask, or barrel, in clear, distinct letters, and must be affixed by the inspector in person, or by some person under his personal supervision and control, who is not directly, nor indirectly, interested in the manufacture nor sale of any product of petroleum. The brand of an inspector is deemed to be his official signature, and must not be permitted to pass out of his custody or control.

**RULE 10.** Upon the inspection of oil by an inspector, the inspector shall deliver to the owner of the oil, or the person for whom the inspection was made, a certificate of inspection, which shall be in the following form:

## APPROVED TEST

Tank No.	Brand of Oil	Record No. of Packages	Degrees

## REJECTED TEST


Total Fees, - - \$.....

No. Barrels Approved, .....

No. Barrels Rejected, .....

For Whom Inspected .....

Date of Inspection ..... 190.....

No. of Certificate .....

Inspector.

## OIL INSPECTOR'S CERTIFICATE

PRESERVE THIS CERTIFICATE

\$..... 190.....

RECEIVED OF.....

DOLLARS,

as fees for the inspection of.....

Barrels

ILLUMINATING OIL, and Rejection of

87, acts Thirtieth General Assembly, State of Iowa. Barrels of GASOLINE, under Chapter

No. .... Inspector.

## APPROVED TEST

Tank No.	Brand of Oil	Record No. of Packages	Degrees

## REJECTED TEST


**RULE 11.** Where oil of different grades, or standards, is placed in receiving or storage tanks, an inspection must be made, and the actual standard of oil from such tanks obtained at all times before it is put into barrels for sale and use. There must be no average test, by taking an average of the different qualities or standards of oil before it is placed in such tanks. The inspector must know the quality and standard of the oil before he affixes his brand thereon. Where a number of barrels are filled consecutively from a tank, previously inspected, an inspection of one barrel would suffice for that particular lot of barrels, *provided*, no oil has been added to the tank during the process of filling the barrels. The barreling, testing and branding must constitute one transaction. There must be no lapse of time therein. The statute requires all products of petroleum, kerosene as well as gasoline, to be inspected and branded. The branding is notice to the public of the inspection. The statute makes no distinction in the form or size of the vessel in which such product is placed. It is no less imperative that when fifty gallons of kerosene are drawn from a tank into five ten-gallon cans that the cans should be branded than that fifty gallons of kerosene taken from the same tank and put into a barrel be branded. When a product of petroleum to be used for illuminating purposes has been inspected, the fact of such inspection must be shown upon the vessel from which it is to be sold again or used. When inspected in a storage tank or tank-car, it need not be re-inspected when barreled or canned, but the barrel, can or package must be branded according to the actual standard of the article contained therein. The barrel or vessel must not be branded before filling.

Empty barrels to be subsequently filled with gasoline may be branded with stencil number three as "rejected for illuminating purposes."

**RULE 12.** Oil received from jobbers in barrels is frequently of various standards, and the actual standard can not be ascertained except by a separate test of each barrel. There must be no average or cumulative tests. For instance, a sample of oil taken from five barrels of 102 degree oil and five barrels of 108 degree oil would give a mixture that would, when tested, cause the whole ten barrels to be rejected, whereas five barrels, separately tested, would have to be approved. Averages are not permissible in the inspection service. Every barrel must be tested.

**RULE 13.** Where oil is shipped into this State in barrels, or from one point in this State to another point in this State, that has not been lawfully inspected within this State, each and every barrel must be inspected and the oil therein tested. The testing of one barrel will not authorize an inspector to brand the entire number as of the standard of the barrel tested.

The practice of jobbers in delivering oil to retail dealers without inspection is a direct violation of law. The delivery constitutes *prima facie* evidence of sale. A retail dealer receiving a lot of uninspected oil can not justify himself for selling such oil on the ground that the jobber is responsible to the State for the violation of law. He must immediately notify the inspector that the oil is in his possession. Inspectors must exercise diligence to arraign offenders and stop the practice. They must, with strict impartiality, insist upon obedience to law in their respective districts.

**RULE 14.** Oil in transit must not be inspected outside of the district to which it is sent.

**RULE 15.** In case of a lamp explosion the inspector in whose district the

accident occurred shall immediately investigate all the facts in connection therewith and report the same to the State Board of Health.

**RULE 16.** Inspectors must regard their duties as inspectors paramount to all other duties, and upon notification must perform them without delay.

**RULE 17.** No thermometer shall be used by inspectors for testing oil unless the same has been calibrated and tested for errors at the observatory at Yale college, and a certificate secured showing the result of the calibration. A copy of all such certificates shall be sent to the secretary of the State Board of Health, and recorded in his office.

#### MINERS' OIL

The Code has the following relative to the sale, use, and inspection of miners' oil:

**"SECTION 2493. Purity of Oil.**—Only pure animal or vegetable oil, paraffine, or electric lights shall be used for illuminating purposes in any mine in this State, and for the purpose of determining the purity of oils the State Board of Health shall fix a standard of purity and establish regulations for testing said oil, and said standard and regulations, when so determined, shall be recognized by all the courts of the State."

**"SEC. 2494. Penalty.**—Any person, firm or corporation, either by themselves, agents or employes, selling or offering to sell for illuminating purposes in any mine in this State any adulterated or impure oil, or oil not recognized by the State Board of Health as suitable for illuminating purposes as contemplated in this chapter, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not less than twenty-five dollars nor more than one hundred dollars for each offense; and any mine owner or operator or employe of such owner or operator who shall knowingly use, or any mine operator who shall knowingly permit to be used for illuminating purposes in any mine in this State any impure or adulterated oil, or any oil that has not been inspected and improved by an inspector, or any oil the use of which is forbidden in this chapter, shall upon conviction thereof, be fined not less than five dollars nor more than twenty-five dollars."

**"SEC. 2.** That section twenty-four hundred and ninety-five (2495) be stricken out and the following substituted therefor: 'It shall be the duty of an inspector of petroleum products to inspect and test all oil offered for sale, sold, or used for illuminating purposes in coal mines in this State, and for such purpose he may enter upon the premises of any person. If upon test and examination the oil shall meet the requirements made and provided by the State Board of Health, he shall brand, over his own official signature and date, the barrel or vessel holding the same with the words "approved for illuminating coal mines." Should it fail to meet such requirements, he shall brand it over his own official signature and date, "rejected for illuminating coal mines." All inspection shall be made within this State, and paid for by the person for whom the inspection is made at the rate of ten cents per barrel or vessel, which charge shall be a lien on the oil inspected, and be collected by the inspector. Each inspector shall be governed in all things respecting his record, compensation, expenses, and returns to the Secretary of State as provided in sections four and five of chapter 87, laws Thirtieth General Assembly. It shall be the duty of the inspector whenever

<sup>1</sup> Parts in parentheses as amended by the Twenty-seventh General Assembly, chapter 60.

he has good reason to believe that oil is being sold or used in violation of the provisions of this chapter to make complaint to the county attorney of the county in which the offense was committed, who shall forthwith commence proceedings against the offender in any court of competent jurisdiction. All reasonable expenses for analyzing suspected oil shall be paid by the owner of the oil whenever it is found that he is selling or offering to sell impure oil in violation of the provisions of this chapter. Such expenses may be recovered in a civil action, and in criminal proceedings such expenses shall be taxed as part of the cost."

#### INSPECTION OF MINERS' OIL.

In pursuance with the provisions of section 2495-a-Code Supplement, the State Board of Health adopted the following rules:

**RULE 1.** The specific gravity of oil used for illuminating purposes in coal mines must not exceed twenty-two degrees, Tagliabue hydrometer, at sixty degrees temperature, Fahrenheit.

**RULE 2.** All oil must be tested in a glass footed cylinder, one and one-half inches in diameter and eight inches deep. ■

**RULE 3.** Fill the hydrometer jar to within three-fourths inch of the top, introduce the hydrometer, cool or heat as the case may be to sixty degrees, Fahrenheit. Allow the hydrometer to come to rest, read from below, and the last line which appears under the surface of the oil should be regarded as the true reading, care being taken that the hydrometer does not touch the sides of the jar when reading.

**RULE 4.** Fill a round, clear glass bottle two-thirds full with the oil and shake well; the bead should not show fluorescence similar to that of petroleum products.

**RULE 5.** Fill an ordinary miner's lamp with the oil, light and note character and quantity of smoke.

**RULE 6.** All material used for illuminating purposes in coal mines shall be free from smoke, bad odor, and by-products of resin, known as mystic oil.

**RULE 7.** Paraffine wax should not contain more than three per cent of oil, and the maximum melting point shall be one hundred and ten degrees Fahrenheit. To test the melting point of paraffine wax, place a chip of it on hot water, then allow the water to cool slowly, and note the temperature of the water when the wax globule loses its transparency.

**RULE 8.** In all cases of doubt, or question as to inspection, or as to the purity of the oil or paraffine to be used in mines, a sample of the same shall be furnished the State Board of Health for chemical analysis.

All oils, therefore, sold by dealers, or their agents, or furnished by mine owners, or operators; or used by miners in any of the coal mines of Iowa, for illuminating purposes, shall, previous to such use, have been duly inspected and branded by some district oil inspector, legally qualified by the State.

#### LINSEED OIL.

Chapter 52, laws of the Twenty-seventh General Assembly, relating to the sale of linseed (or flaxseed) oil, imposes new duties upon the State Board of Health and upon the oil inspectors of the state. Sections 4 and 5 relating to the "duties and powers of inspectors and board of health" and "the cost of analysis," are as follows:

**SEC. 4. Duties and powers of Inspectors and board of health.** It shall be the duty of the inspectors of petroleum products, under such rules and regulations as the STATE BOARD OF HEALTH may prescribe, to enforce the provisions of this act. The violation of any of the provisions of this act relating to the manufacture and adulteration of linseed or flaxseed oil is hereby declared to be a public nuisance, and any court of competent jurisdiction is authorized, upon application of the board of health or its agents, to enjoin such violation, in the same manner as injunctions are usually granted under the rules and practice of such court. The board, its inspectors, assistants, experts and chemists, and others appointed by it, shall have access, ingress, and egress to and from all places of business and buildings where linseed or flaxseed oil is kept for sale, stored or manufactured. They shall also have the power and authority to open any tank, barrel, can, or other vessel containing such oil, and may inspect the contents thereof, and take samples therefrom for analysis. All clerks, bookkeepers, express agents, railroad agents, or officials, employes of common carriers, or other persons, shall render them all the assistance in their power, when so requested, in tracing, finding, or inspecting such oil.

**SEC. 5. Cost of analysis.** It shall be the duty of the court in every action brought under this act to tax as costs in the cause, the actual and necessary expense of analyzing the linseed or flaxseed oil which shall be in controversy in such proceeding; provided, that the amount so taxed shall not exceed the sum of twenty-five (25) dollars. It shall be the duty of the county attorney, upon the application of the State Board of Health, to attend to the prosecution in the name of the State, of any suit brought for violation of any of the provisions of this act within his county.

Approved June 27, 1905.

ALBERT B. CUMMINS, *Governor.*

H. MATTHEY, *President,*  
J. F. KENNEDY, *Secretary,*  
*State Board of Health.*

#### NAME AND POST OFFICE ADDRESS OF INSPECTORS.

District.	Inspector.	Address.
1	H. M. Pickell, Inspector in Chief.....	Des Moines.
2	Chas. S Rogers .....	Mt. Pleasant.
3	Edwin I. Cameron.....	Davenport.
4	LeRoy Burch.....	Cedar Rapids.
5	A. E. Whitney .....	Fayette.
6	R. A. Santee.....	Cedar Falls.
7	S. W. Morgan.....	Marshalltown.
8	F. B. Rogers. ....	Britt.
9	Thomas Chantland. ....	Badger.
10	W. J. Scott.....	Ida Grove.
11	W. A. Welch.....	Sioux City.
12	{ Ed C. Brown, term expired December 31, 1904....	{ Council Bluffs.
	{ L. B. Cousins, from January 1, 1905.....	
13	John B. Currie.....	Creston.
14	H. Shivers .....	Knoxville.

**REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
JULY, 1908.**

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper brand- ing barrels.
Pickell, H. M. ....	Des Moines	6	1,180	1,918	\$ 309.80	\$ 100.00	\$ 88.95	\$ 125.85	\$ 75.00
Rogers, C. S. ....	Mt Pleasant		835	1,623	246.90	99.25	103.02	44.65	70.00
Cameron, E. I. ....	Davenport		1,518	2,024	351.20	100.00	94.45	159.75	85.00
Burch, LeRoy ....	Cedar R.		974	1,717	269.10	100.00	89.71	79.39	75.00
Whitney, A. E. ....	Fayette		1,203	684	188.70	84.87	104.08		75.00
Santee, R. A. ....	Cedar Falls		465	1,995	246.00	99.00	85.08	111.92	25.00
Morgan, S. W. ....	Marshall'n		1,544	1,275	231.90	100.00	24.73	157.17	10.00
Rogers, F. B. ....	Britt		1,083	1,831	236.40	96.60	43.74	96.06	10.00
Chantland, Thos. ....	Badger		655	1,161	181.60	82.90	41.82	57.38	18.00
*Scott, W. J. ....	Ida Grove		497	608	110.50	65.12	58.79		80.00
Welch, W. A. ....	Sioux City		938	1,923	238.10	100.00	78.56	114.54	47.25
Brown, Ed. C. ....	Council Bl.		626	1,853	198.40	87.10	30.04	81.26	15.00
Currie, J. B. ....	Oreston		814	899	171.80	80.82	25.19	85.79	10.00
Shivvers, H. ....	Knoxville		1,140	1,688	277.80	100.00	116.24	61.56	67.50
Total. ....		6	13,442	20,159	\$3,860.70	\$1,294.94	\$ 918.85	\$1,155.82	\$ 612.75

\* Fees and expenses of W. J. Scott \$3.41 in excess of amount of fees received.

**REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
AUGUST, 1908.**

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper brand- ing barrels.
Pickell, H. M. ....	Des Moines		1,374	1,706	\$ 308.00	\$ 100.00	\$ 89.45	\$ 118.55	\$ 75.00
Rogers, C. S. ....	Mt Pleasant		1,746	1,681	387.70	100.00	116.94	120.76	70.00
Cameron, E. I. ....	Davenport		4,019	1,669	568.80	100.00	96.32	372.48	85.00
Burch, LeRoy ....	Cedar R.		2,394	1,790	418.40	100.00	98.94	224.46	75.00
Whitney, A. E. ....	Fayette		2,182	841	297.30	100.00	114.60	82.64	75.00
Santee, R. A. ....	Cedar Falls		1,877	1,175	255.20	100.00	48.05	109.15	25.00
Morgan, S. W. ....	Marshall'n		1,756	929	268.50	100.00	23.79	144.77	10.00
Rogers, F. B. ....	Britt		1,683	849	208.70	83.42	55.52	59.76	10.00
Chantland, Thos. ....	Badger		1,574	1,812	288.00	100.00	57.52	131.08	18.00
Scott, W. J. ....	Ida Grove		1,310	619	192.90	85.72	76.88	30.35	80.00
Welch, W. A. ....	Sioux City		1,786	1,223	301.40	100.00	102.48	96.97	47.25
Brown, Ed. C. ....	Council Bl.		740	1,121	186.10	84.02	81.64	70.44	15.00
Currie, J. B. ....	Oreston		1,622	1,869	299.10	100.00	41.01	158.09	10.00
Shivvers, H. ....	Knoxville		2,488	1,099	358.70	100.00	113.62	140.08	67.50
Total. ....			25,906	16,898	\$4,279.40	\$1,858.16	\$1,069.66	\$1,861.58	\$ 612.75

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
SEPTEMBER, 1908.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected. for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper brand- ing barrels.
Pickell, H. M. . . .	Des Moines . . .	2,580	1,145		\$ 372.50	\$ 100.00	\$ 91.15	\$ 181.85	\$ 75.00
Rogers, C. S. . . .	Mt Pleasant . . .	2,396	1,381		371.70	100.00	121.16	150.54	70.00
Cameron, E. I. . .	Davenport. . . .	3,176	1,425		460.10	100.00	96.23	263.87	85.00
Burch, LeRoy. . .	Cedar R. . . . .	2,025	944		310.60	100.00	86.91	123.69	75.00
Whitney, A. E. . .	Fayette. . . . .	1,808	1,151		295.90	100.00	118.57	77.33	75.00
Santee, R. A. . . .	Cedar Falls . . .	1,390	1,422		275.20	100.00	38.83	136.87	25.00
Morgan, S. W. . .	Marshall'n . . .	2,350	705		305.50	100.00	30.57	174.93	10.00
Rogers, F. B. . . .	Britt. . . . .	784	1,385		216.90	91.72	34.92	90.25	10.00
Chantland, Thos.	Badger . . . . .	1,471	862		233.90	95.82	53.92	83.56	18.00
Scott, W. J. . . . .	Ida Grove. . . .	885	539		142.40	73.10	56.08	13.22	30.00
Welch, W. A. . . .	Sioux City. . . .	2,020	1,124		314.40	100.00	108.45	105.95	47.25
Brown, Ed C. . . .	Council B. . . .	1,563	418		198.19	87.02	40.38	70.70	15.00
Currie, J. B. . . .	Creston. . . . .	1,068	777		184.50	83.62	36.62	64.26	10.00
Shivvers, H. . . .	Knoxville. . . .	1,547	1,838		287.50	100.00	94.74	92.76	67.50
Total. . . . .		18,724,943	14,606	\$3,968.60	\$1,331.28	\$1,003.03	\$1,629.29	\$1,612.75	

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
OCTOBER, 1908.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected. for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper brand- ing barrels.
Pickell, H. M. . . .	Des Moines . . .	2,946	1,073		\$ 402.40	\$ 100.00	\$ 109.00	\$ 202.40	\$ 75.00
Rogers, C. S. . . .	Mt Pleasant . . .	1,948	1,291		323.90	100.00	111.98	111.92	70.00
Cameron, E. I. . .	Davenport. . . .	3,131	1,243		487.40	100.00	99.85	237.55	85.00
Burch, LeRoy. . .	Cedar R. . . . .	2,995	880		385.50	100.00	119.29	166.21	75.00
Whitney, A. E. . .	Fayette. . . . .	2,718	1,034		375.20	100.00	116.04	159.16	75.00
Santee, R. A. . . .	Cedar Falls . . .	1,494	1,207		270.10	100.00	43.15	126.95	25.00
Morgan, S. W. . .	Marshall'n . . .	2,383	875		315.80	100.00	38.44	177.86	10.00
Rogers, F. B. . . .	Britt . . . . .	1,907	968		237.50	100.00	69.96	87.54	10.00
Chantland, Thos.	Badger . . . . .	1,442	924		236.60	96.65	48.87	91.08	18.00
Scott, W. J. . . . .	Ida Grove. . . .	1,464	535		199.90	87.47	76.43	56.00	30.00
Welch, W. A. . . .	Sioux City. . . .	1,912	1,638		391.50	100.00	92.41	169.09	47.25
Brown, Ed. C. . . .	Council B. . . .	1,325	441		176.60	81.65	46.66	48.29	15.00
Currie, J. B. . . .	Creston . . . . .	1,685	891		258.60	100.00	42.10	116.50	10.00
Shivvers, H. . . .	Knoxville. . . .	2,937	631		356.80	100.00	109.42	147.88	67.50
Total. . . . .		65,811,197	13,316	\$4,857.80	\$1,965.77	\$1,114.00	\$1,877.43	\$1,727.43	\$12.75

**REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
JULY, 1908.**

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M. ....	Des Moines	1,180	1,918	\$ 809.80	\$ 100.00	\$ 88.95	\$ 125.85	\$ 75.00	
Rogers, C. S. ....	Mt Pleasant	835	1,628	248.90	99.25	103.02	44.65	70.00	
Cameron, E. I. ....	Davenport.	1,618	2,024	351.20	100.00	94.45	159.75	85.00	
Burch, LeRoy ....	Cedar R. ....	974	1,717	289.10	100.00	89.71	79.89	75.00	
Whitney, A. E. ....	Fayette ....	1,203	684	188.70	84.87	104.08	.....	75.00	
Santee, R. A. ....	Cedar Falls	465	1,995	246.00	59.00	35.08	111.92	25.00	
Morgan, S. W. ....	Marshall'a	1,644	1,275	281.90	100.00	24.73	157.17	10.00	
Rogers, F. B. ....	Britt .....	1,083	1,831	236.40	96.00	43.74	98.06	10.00	
Chantland, Thos.	Badger ....	665	1,161	181.60	82.90	41.82	57.38	18.00	
Scott, W. J. ....	Ida Grove.	497	608	110.50	65.12	53.79	.....	30.00	
Welch, W. A. ....	Sioux City.	938	1,923	238.10	100.00	78.56	114.54	47.25	
Brown, Ed. O. ....	Council B.	626	1,853	198.40	87.10	30.04	81.26	15.00	
Currie, J. B. ....	Creston ..	814	899	171.80	80.82	25.19	65.79	10.00	
Shivvers, H. ....	Knoxville	1,140	1,688	277.80	100.00	116.24	61.56	67.50	
Total. ....	.....	8	18,442	20,159	\$3,860.70	\$1,294.94	\$ 918.85	\$1,155.82	\$ 612.75

\* Fees and expenses of W. J. Scott \$3.41 in excess of amount of fees received.

**REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
AUGUST, 1908.**

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M. ....	Des Moines	1,374	1,706	\$ 808.00	\$ 100.00	\$ 89.45	\$ 118.55	\$ 75.00	
Rogers, C. S. ....	Mt Pleasant	1,746	1,631	337.70	100.00	116.94	120.76	80.00	
Cameron, E. I. ....	Davenport.	4,019	1,669	568.80	100.00	96.32	372.48	85.00	
Burch, LeRoy ....	Cedar R. ....	2,394	1,790	418.40	100.00	93.94	224.46	75.00	
Whitney, A. E. ....	Fayette ....	2,182	841	297.30	100.00	114.60	82.64	75.00	
Santee, R. A. ....	Cedar Falls	1,377	1,175	255.20	100.00	46.05	109.15	25.00	
Morgan, S. W. ....	Marshall'n	1,753	929	263.50	100.00	23.73	144.77	10.00	
Rogers, F. B. ....	Britt .....	1,633	349	203.70	83.42	55.52	59.78	10.00	
Chantland, Thos.	Badger ....	1,574	1,312	288.60	100.00	57.52	131.08	18.00	
Scott, W. J. ....	Ida Grove.	1,310	619	192.90	85.72	76.83	80.35	30.00	
Welch, W. A. ....	Sioux City.	1,786	1,228	301.40	100.00	102.43	98.97	47.25	
Brown, Ed. C. ....	Council B.	740	1,121	186.10	84.02	31.64	70.44	15.00	
Currie, J. B. ....	Creston ..	1,622	1,369	292.10	100.00	41.01	153.09	10.00	
Shivvers, H. ....	Knoxville	2,438	1,099	353.70	100.00	113.62	140.08	67.50	
Total. ....		25,906	10,885	\$4,279.40	\$1,858.16	\$1,059.66	\$1,861.58	\$ 612.75	

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
SEPTEMBER, 1908.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso-line rejected for illuminating purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, branding barrels.
Pickell, H. M. ....	Des Moines	2	580	1,145	\$ 372.50	\$ 100.00	\$ 91.15	\$ 181.35	\$ 75.00
Rogers, C. S. ....	Mt Pleasant	2	886	1,381	371.70	100.00	121.16	150.54	70.00
Cameron, E. I. ....	Davenport	3	176	1,425	460.10	100.00	96.23	263.87	85.00
Burch, LeRoy ....	Cedar R. ....	137	2,025	944	310.60	100.00	86.91	123.69	75.00
Whitney, A. E. ....	Fayette	1	1,808	1,151	295.50	100.00	118.57	77.93	75.00
Santee, R. A. ....	Cedar Falls	1	1,390	1,422	275.20	100.00	38.39	136.87	25.00
Morgan, S. W. ....	Marshall's	2	350	705	305.50	100.00	30.57	174.93	10.00
Rogers, F. B. ....	Britt	7	784	1,385	216.00	91.72	34.92	90.25	10.00
Chantland, Thos. ....	Badger	1	1,471	862	233.90	95.82	53.92	83.56	18.00
Scott, W. J. ....	Ida Grove	8	885	539	142.40	73.10	56.08	13.22	30.00
Welch, W. A. ....	Sioux City	2	2,020	1,124	314.40	100.00	108.45	105.95	47.25
Brown, Ed. C. ....	Council Bl.	1	503	418	198.10	87.02	40.38	70.70	15.00
Currie, J. B. ....	Creston	1	1,008	777	184.50	83.62	36.62	64.26	10.00
Shivvers, H. ....	Knoxville	1	1,547	1,338	287.50	100.00	94.74	92.76	67.50
Total		137	24,943	14,606	\$3,968.60	\$1,531.28	\$1,068.08	\$1,629.29	\$ 612.75

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
OCTOBER, 1908.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso-line rejected for illuminating purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, branding barrels.
Pickell, H. M. ....	Des Moines	2	946	1,078	\$ 402.40	\$ 100.00	\$ 109.00	\$ 202.40	\$ 75.00
Rogers, C. S. ....	Mt Pleasant	1	1,948	1,291	323.90	100.00	111.96	111.92	70.00
Cameron, E. I. ....	Davenport	3	131	1,243	487.40	100.00	99.85	237.55	85.00
Burch, LeRoy ....	Cedar R. ....	2	996	860	385.50	100.00	119.29	166.21	75.00
Whitney, A. E. ....	Fayette	2	718	1,034	375.20	100.00	116.04	159.16	75.00
Santee, R. A. ....	Cedar Falls	1	1,494	1,207	270.10	100.00	43.15	126.95	25.00
Morgan, S. W. ....	Marshall's	2	2,263	875	315.80	100.00	38.44	177.36	10.00
Rogers, F. B. ....	Britt	1	1,007	968	237.50	100.00	69.96	87.54	10.00
Chantland, Thos. ....	Badger	1	1,442	924	236.00	96.65	48.87	91.08	18.00
Scott, W. J. ....	Ida Grove	1	1,464	535	199.90	87.47	76.43	36.00	30.00
Welch, W. A. ....	Sioux City	65	1,912	1,638	391.50	100.00	92.41	169.09	47.25
Brown, Ed. C. ....	Council Bl.	1	1,325	441	178.00	81.65	46.66	48.29	15.00
Currie, J. B. ....	Creston	1	1,665	891	258.60	100.00	42.10	116.50	10.00
Shivvers, H. ....	Knoxville	1	2,937	631	356.80	100.00	169.42	147.38	67.50
Total		65	31,197	13,316	\$4,857.80	\$1,965.77	\$1,114.00	\$1,877.43	\$ 612.75

### REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF NOVEMBER, 1903.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected, for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M. ....	Des Moines	3,471	1,110		\$ 458.10	\$ 100.00	\$ 98.80	\$ 259.30	\$ 75.00
Rogers, C. S. ....	Mt Pleasant	2,425	130		255.90	100.00	117.58	88.32	70.00
Cameron, E. I. ....	Davenport	3,642	406		413.80	100.00	98.35	215.45	85.00
Burch, Lefroy	Cedar R.	1,850	896		224.60	93.65	101.32	29.63	75.00
Whitney, A. E. ....	Fayette	2,951	270		322.10	100.00	138.80	83.21	75.00
Santee, R. A. ....	Cedar Falls	2,104	689		279.30	100.00	56.25	123.05	25.00
Morgan, S. W. ....	Marshall'n	2,540	589		312.90	100.00	29.21	183.69	10.00
Rogers, F. B. ....	Britt	2,292	678		297.00	100.00	65.60	131.40	10.00
Chantland, Thos.	Badger	2,110	231		284.10	96.02	56.12	81.96	11.50
Scott, W. J. ....	Ida Grove	1,581	132		171.30	80.32	85.39	5.59	30.00
Welch, W. A. ....	Sioux City	120	2,390	458	296.80	100.00	112.25	84.55	47.25
Brown, Ed. C. ....	Council B.	1,243	332		157.50	76.87	47.95	32.68	15.00
Currie, J. B. ....	Creston	1,331	409		174.00	81.00	38.07	54.93	10.00
Shivvers, H. ....	Knoxville	2,908	447		383.50	100.00	132.10	108.40	67.50
Total		124,328.88	6,367	\$3,982.90	\$1,327.86	\$1,177.88	\$1,427.16	\$606.25	

### REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF DECEMBER, 1903.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected, for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M. ....	Des Moines	3,341	1,020		\$ 436.10	\$ 100.00	\$ 105.65	\$ 230.25	\$ 75.00
Rogers, C. S. ....	Mt. Pleasant	1,530	81		187.00	84.25	102.98	47	70.00
Cameron, E. I. ....	Davenport	2,485	1,098		358.10	100.00	97.78	160.32	85.00
Burch, Lefroy	Cedar R.	2,284	95		319.00	100.00	111.20	108.70	75.00
Whitney, A. E. ....	Fayette	1,544	741		228.50	94.62	131.84	2.64	75.00
Santee, R. A. ....	Cedar Falls	1,569	801		237.00	96.75	41.46	98.79	25.00
Morgan, S. W. ....	Marshall'n	2,926	519		344.50	100.00	30.65	218.85	10.00
Rogers, F. B. ....	Britt	1,433	93		238.80	96.70	59.16	80.94	10.00
Chantland, Thos.	Badger	1,182	564		174.60	81.15	42.73	50.73	11.50
Scott, W. J. ....	Ida Grove	1,336	408		193.40	85.85	86.60	30.96	30.00
Welch, W. A. ....	Sioux City	2,757	670		312.70	100.00	114.18	128.52	47.25
Brown, Ed. C. ....	Council B.	1,148	111		125.40	68.67	48.60	13.83	15.00
Currie, J. B. ....	Creston	2,090	223		224.30	84.57	63.64	70.39	10.00
Shivvers, H. ....	Knoxville	2,900	428		302.80	100.00	117.32	86.48	67.50
Total		28,185	8,971	\$3,715.60	\$1,302.86	\$1,147.38	\$1,263.96	\$606.25	

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
JANUARY, 1904.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gas-oil line rejected for illuminating purposes	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, branding barrels.
Pickell, H. M....	Des Moines	...	3,199	1,283	\$ 448.20	\$ 100.00	\$ 116.90	\$ 231.30	\$ 75.00
Rogers, C. S....	Mt Pleasant	...	1,836	744	258.00	100.00	112.96	45.04	70.00
Cameron, E. I....	Davenport	...	2,049	1,212	326.10	100.00	97.62	128.48	85.00
Burch, LeRoy....	Cedar R....	...	1,412	1,010	242.20	98.05	97.55	46.60	75.00
Whitney, A. E....	Fayette	...	1,754	512	226.60	94.15	116.19	16.26	75.00
Santee, R. A....	Cedar Falls	...	1,289	631	192.00	85.50	47.51	58.99	25.00
Morgan, R. W....	Marshall'n	...	2,818	763	358.10	100.00	34.90	223.20	10.00
Rogers, F. B....	Britt	...	1,130	371	150.10	75.02	50.35	24.73	10.40
Chantland, Thos.	Badger	...	1,517	795	231.20	95.30	44.84	91.06	11.50
Scott, W. J....	Ida Grove	...	1,439	222	165.10	79.02	77.60	9.48	30.00
Welch, W. A....	Sioux City	...	2,127	1,117	324.40	100.00	104.06	120.34	47.25
Brown, Ed. C....	Council Bl.	...	1,357	484	184.10	83.52	31.92	68.66	15.00
Currie, J. B....	Creston	...	1,206	303	150.90	75.22	43.49	32.19	10.40
Shivers, H....	Knoxville.	...	2,257	887	314.40	100.00	118.91	95.49	67.60
Total	...	...	25,390	10,334	\$3,572.40	\$1,285.78	\$1,094.80	\$1,191.82	\$ 606.25

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
FEBRUARY, 1904.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gas-oil line rejected for illuminating purposes	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, branding barrels.
Pickell, H. M....	Des Moines	...	2,136	934	\$ 306.40	\$ 100.00	\$ 90.10	\$ 116.30	\$ 75.00
Rogers, C. S....	Mt Pleasant	...	2,268	810	307.80	100.00	114.63	93.12	70.00
Cameron, E. I....	Davenport	...	1,821	821	264.20	100.00	103.15	61.05	85.00
Burch, LeRoy....	Cedar R....	...	1,540	1,004	254.40	100.00	98.42	65.98	75.00
Whitney, A. E....	Fayette	...	1,278	493	177.10	67.90	109.44	...	75.00
Santee, R. A....	Cedar Falls	...	1,201	697	182.80	84.95	45.48	59.37	25.00
Morgan, R. W....	Marshall'n	...	1,373	1,321	269.40	100.00	22.45	146.95	10.00
Rogers, F. B....	Britt	...	1,117	865	198.20	87.05	65.50	45.65	15.00
Chantland, Thos.	Badger	...	1,946	631	162.70	78.17	33.60	50.93	11.50
Scott, W. J....	Ida Grove	...	1,197	293	149.00	74.75	66.20	7.96	30.00
Welch, W. A....	Sioux City	...	2,460	746	320.60	100.00	110.54	110.00	47.25
Brown, Ed. C....	Council Bl.	...	2,104	851	295.60	100.00	59.76	135.84	15.00
Currie, J. B....	Creston	...	1,207	981	219.20	92.30	41.88	85.02	10.40
Shivers, H....	Knoxville.	...	3,245	795	401.00	100.00	128.59	172.41	67.50
Total	...	...	42,887	11,263	\$3,515.40	\$1,284.88	\$ 1,089.88	\$1,140.64	\$ 611.25

**REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
MARCH, 1904.**

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M. ....	Des Moines	...	2,841	929	\$ 377.00	\$ 100.00	\$ 100.20	\$ 176.80	\$ 75.00
Rogers, C. S. ....	Mt Pleasant	...	1,843	727	257.00	100.00	112.70	44.30	70.00
Cameron, E. I. ....	Davenport	...	2,637	1,363	340.00	100.00	102.88	137.17	85.00
Burch, LeRoy. ....	Cedar R.	...	2,489	628	311.70	100.00	109.92	101.78	75.00
Whitney, A. E. ....	Fayette	...	1,361	378	173.90	63.58	110.32	...	75.00
Santee, R. A. ....	Cedar Falls	...	1,244	842	208.60	89.65	49.17	69.78	25.00
Morgan, S. W. ....	Marshall'n	...	2,661	531	319.20	100.00	29.85	189.83	10.00
Rogers, F. B. ....	Britt	...	1,756	539	229.50	94.87	76.14	58.49	15.00
Chantland, Thos. ....	Badger	...	1,774	373	214.70	91.17	69.28	55.25	11.50
Scott, W. J. ....	Ida Grove	...	1,194	929	212.30	90.57	78.10	48.63	30.00
Welch, W. A. ....	Sioux City	...	1,813	1,489	330.20	100.00	99.89	130.31	47.25
Brown, Ed. C. ....	Council B.	...	2,520	732	325.20	100.00	61.35	163.85	15.00
Currie, J. B. ....	Creston	...	1,729	297	202.60	88.15	47.68	66.77	10.00
Shivvers, H. ....	Knoxville.	...	2,132	496	262.80	100.00	125.65	37.15	67.50
Total. ....			27,394	10,253	\$3,764.70	\$1,317.99	\$1,166.58	\$1,380.18	\$11.25

**REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
APRIL, 1904.**

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M. ....	Des Moines	...	2,234	1,051	\$ 328.50	\$ 100.00	\$ 92.10	\$ 136.40	\$ 75.00
Rogers, C. S. ....	Mt Pleasant	...	1,515	484	199.90	87.47	95.86	16.57	70.00
Cameron, E. I. ....	Davenport	...	4,262	886	515.00	100.00	93.79	315.21	85.00
Burch, LeRoy. ....	Cedar R.	...	1,429	727	215.60	91.40	90.16	84.04	75.00
Whitney, A. E. ....	Fayette	...	1,181	971	210.20	90.05	101.71	18.44	75.00
Santee, R. A. ....	Cedar Falls	...	977	685	166.00	79.00	54.15	52.85	25.00
Morgan, S. W. ....	Marshall'n	...	1,728	1,020	274.80	100.00	24.67	150.13	10.00
Rogers, F. B. ....	Britt	...	810	578	138.90	72.20	44.45	22.15	15.00
Chantland, Thos. ....	Badger	...	1,071	304	197.50	86.87	47.28	63.35	11.50
Scott, W. J. ....	Ida Grove	...	1,262	262	152.40	75.60	75.00	1.70	30.00
Welch, W. A. ....	Sioux City	...	1,812	967	277.70	100.00	89.30	89.40	47.00
Brown, Ed. C. ....	Council B.	...	1,195	1,425	262.00	100.00	44.17	117.83	15.00
Currie, J. B. ....	Creston	...	1,106	749	185.50	83.87	35.43	66.20	10.00
Shivvers, H. ....	Knoxville.	...	1,927	842	276.90	100.00	99.08	77.87	67.50
Total. ....			22,459	11,549	\$3,400.80	\$1,266.46	\$72.12	\$1,162.22	\$11.00

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
MAY, 1904.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M....	Des Moines	1,468	2,101		\$ 356.90	\$ 100.00	\$ 91.95	\$ 164.95	\$ 75.00
Rogers, C. S....	Mt Pleasant	1,269	1,402		236.10	100.00	102.88	68.72	70.00
Cameron, E. I....	Davenport	2,829	2,291		463.00	100.00	108.25	258.75	85.00
Burch, LeRoy....	Cedar R....	874	1,838		271.20	100.00	83.68	87.57	75.00
Whitney, A. E....	Fayette	1,265	1,877		264.20	100.00	112.19	52.01	75.00
Santee, B. A....	Cedar Falls	723	1,912		368.50	100.00	40.80	123.20	25.00
Morgan, S. W....	Marshall'n	1,458	1,156		260.90	100.00	25.97	133.93	10.00
Rogers, F. B....	Britt	825	1,686		251.10	100.00	43.90	102.20	15.00
Chantland, Thos.	Badger	685	1,597		258.20	100.00	22.89	123.31	11.50
Scott, W. J....	Ida Grove.	5	1,066		151.80	75.45	43.89	27.46	80.00
Welch, W. A....	Sioux City	1,360	1,141		250.10	100.00	59.60	60.50	47.00
Brown, Ed. C....	Council B.	1,102	685		178.70	82.17	60.48	46.05	15.00
Currie, J. B....	Creston	1,322	1,091		249.10	20.77	43.31	106.02	10.00
Shivvers, H....	Knoxville.	2,089	1,207		324.60	100.00	115.61	108.99	67.50
<b>Total.</b>		128	17,411	20,550	\$3,908.40	\$1,887.89	\$ 987.55	\$1,408.60	\$ 611.00

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF  
JUNE, 1904.

Inspector.	Address.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes.	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
Pickell, H. M....	Des Moines	1,579	1,618		\$ 319.70	\$ 100.00	\$ 95.45	\$ 124.25	\$ 75.00
Rogers, C. S....	Mt Pleasant	979	1,798		247.20	69.80	83.42	64.45	70.00
Cameron, E. I....	Davenport	1,481	1,629		311.00	100.00	97.62	113.38	85.00
Burch, LeRoy....	Cedar R....	1,482	2,127		360.90	100.00	93.88	167.52	75.00
Whitney, A. E....	Fayette	1,877	1,878		275.00	100.00	108.75	71.25	75.00
Santee, B. A....	Cedar Falls	891	1,156		205.00	88.75	41.52	74.73	25.00
Morgan, S. W....	Marshall'n	1,002	1,650		265.20	160.00	24.50	140.70	10.00
Rogers, F. B....	Britt	574	1,242		181.60	82.90	41.10	57.60	15.00
Chantland, Thos.	Badger	1,079	1,850		248.10	98.45	54.27	91.06	11.50
Scott, W. J....	Ida Grove.	1,202	332		153.40	75.55	73.78	89.54	30.00
Welch, W. A....	Sioux City	1,188	1,483		261.60	100.10	72.06	89.54	45.00
Brown, Ed. C....	Council B.	685	775		141.40	72.85	34.86	84.19	15.00
Currie, J. B....	Creston	255	1,084		123.80	69.72	18.83	40.85	10.00
Shivvers, H....	Knoxville.	1,859	1,159		261.80	100.00	108.41	43.39	67.50
<b>Total.</b>		14,732	18,783	\$3,846.50	\$1,287.42	\$ 947.45	\$1,112.46	\$ 609.00	

\*Fee and expense of W. J. Scott \$1.23 in excess of fees collected.

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF JULY, 1904.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Expenses.			
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of cents per barrel on goods shipped out of state.		Paid inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.	Net amount to credit of state after fees and expenses paid.
Pickell, H. M.	Des Moines		1,214	2,668	887.70			\$	\$ 134.48	\$ 17.16	75.00	\$ 161.12
Rogers, C. S.	Mt. Pleasant		1,268	1,862	262.50	221	8.84	387.70	100.00	42.40	70.00	41.26
Cameron, E. I.	Davenport		1,122	1,862	910.40	751	81.24	238.66	100.00	12.68	85.00	81.58
Burch, LeRoy	Cedar Rapids		1,992	2,499	949.10			279.16	100.00	11.21	75.00	162.89
Whitney, A. E.	Fayette		1,181	496	166.70			349.10	73.01	18.69	75.00	...
Bantee, R. A.	Cedar Falls		608	1,471	207.40			166.70	89.85	5.46	25.00	87.69
Morgan, S. W.	Marshalltown		1,117	1,744	266.10			207.40	100.00	4.51	15.00	161.69
Rogers, F. B.	Britt		1,149	682	198.10			296.10	87.02	32.67	17.00	61.41
Chantland, Thos.	Badger		576	1,182	176.80			193.10	81.46	21.61	1.00	71.74
Scott, W. J.	Ira Grove		709	1,008	171.20			176.80	80.80	27.72	...	68.18
Reich, W. A.	Sionx City		1,938	1,848	326.60	576	23.04	306.66	100.00	31.74	42.00	129.82
Brown, Ed. C.	Council Bluffs		478	1,686	211.40			211.40	90.36	9.72	16.00	96.83
Currie, J. B.	Creston		824	849	169.80			169.80	77.32	6.97	10.00	53.01
Shivers, H.	Knoxville		1,089	1,554	259.80	91	3.64	255.60	100.00	25.79	60.00	69.87
Total.....		13,900	20,724	3,471.60	1,699	\$ 66.76	\$ 3,404.84	\$ 1,813.23	\$ 283.27	\$ 565.00	\$ 1,243.39	

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF AUGUST, 1904.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Expenses.			
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.		Paid inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and bondholders.	Net amount to credit of state after fees and expenses paid.
Pickell, H. M.	Des Moines.	..	2,459	2,811	\$ 527.00	..	\$ ..	\$ 527.00	\$ 150.00	\$ 43.67	\$ 75.00	\$ 258.83
Rogers, C. S.	Mt. Pleasant.	..	1,181	1,966	254.70	384	15.76	234.94	100.00	42.05	70.00	168.89
Cameron, E. I.	Davenport.	..	1,892	2,703	456.50	567	22.08	433.82	100.00	7.80	85.00	241.02
Burch, LeRoy.	Cedar Rapids.	..	2,768	1,981	374.90	..	..	374.90	100.00	27.69	75.00	172.21
Whitney, A. E.	Fayette.	..	1,131	1,450	253.10	..	..	253.10	100.00	22.10	75.00	61.00
Santee, R. A.	Cedar Falls.	..	275	1,691	299.00	..	..	299.00	100.00	5.74	25.00	185.86
Morgan, S. W.	Marshalltown.	..	1,266	1,223	249.40	12	.48	248.92	99.85	17.66	15.00	116.41
Rogers, F. B.	Britt.	..	1,139	1,400	253.90	..	..	253.90	100.00	31.08	17.00	105.82
Chantland, Thos.	Badger.	..	1,190	1,411	260.10	..	..	260.10	100.00	28.46	16.00	115.64
Scott, W. J.	Ida Grove.	..	656	881	148.70	..	..	148.70	74.67	25.70	..	48.38
Welch, W. A.	Sioux City.	..	1,008	1,924	298.20	828	38.12	260.08	100.00	23.97	45.00	91.11
Brown, Ed. C.	Council Bluffs.	..	1,192	2,035	322.70	..	..	322.70	100.00	20.21	15.00	187.49
Currie, J. B.	Creston.	..	1,082	2,476	166.80	..	..	166.80	76.45	25.02	10.00	44.33
Shivvers, H.	Knoxville.	..	2,226	1,280	350.60	139	5.56	345.04	100.00	40.11	60.00	144.93
Total	.....	20,235	21,457	21,457	\$ 4,172.20	1,940	\$ 77.60	\$ 4,094.60	\$ 1,400.97	\$ 861.26	\$ 588.00	\$ 1,746.37

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF SEPTEMBER, 1904.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.		Rebates.		Total amount of fees received by the state.	Expenses.				
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.		Number barrels shipped out of state.	Deduction of cents per barrel on goods shipped out of state.	Paid inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.
Pickell, H. M.	Des Moines.		2,846	3,807	\$ 516.30	219	8.76	\$ 150.00	\$ 66.53	\$ 75.00	\$ 231.77
Rogers, C. S.	Mt. Pleasant.		2,553	2,837	479.00	844	83.76	100.00	45.23	70.00	245.01
Cameron, E. I.	Dayenport.		3,224	2,671	599.50			100.00	28.16	85.00	847.59
Burch, LeRoy.	Cedar Rapids.		2,126	1,077	320.30			100.00	21.89	75.00	123.91
Whitney, B. A.	Fayette.		3,547	1,071	463.90			100.00	60.17	75.00	233.68
Santee, B. A.	Cedar Falls.		2,002	1,644	364.00			100.00	16.81	25.00	232.79
Morgan, S. W.	Marshalltown.		1,626	908	251.90	21	84	100.00	16.90	15.00	130.16
Rogers, F. B.	Bedger.		1,618	1,054	396.70			100.00	42.34	17.00	107.86
Chandler, Thos.	Ida Grove.		2,207	1,878	408.50			100.00	57.05	9.00	254.14
Scott, W. J.	Sioux City.	1	1,548	1,097	290.10	700	28.00	100.00	67.05	90.00	18.06
Welch, W. A.	Council Bluffs.	1	1,683	1,071	275.40			100.00	53.42	40.00	53.98
Brown, Ed. C.	Creston.		1,637	972	295.60			100.00	21.95	10.00	123.66
Currie, J. B.			1,448	1,483	296.60			100.00	27.87	10.00	149.03
Shivers, H.	Knoxville.		1,818	1,878	289.10	22	.88	100.00	18.02	60.00	110.20
Total.		2	23,347	20,988	\$ 5,038.70	1,905	\$ 72.24	\$ 1,450.00	\$ 516.90	\$ 656.00	\$ 2,884.56

\* Salary of brander for months of July, August and September.

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF OCTOBER, 1904.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Expenses.			Net amount to credit of state after fees and expenses paid.
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.		Paid inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.	
Pickell, H. M.	Des Moines.	1	8,080	1,650	473.10	258	10.32	\$	\$ 150.00	\$ 22.22	\$ 75.00	\$ 225.88
*Rogers, C. S.	Mt. Pleasant.	.....	760	816	157.60	664	26.56	147.28	76.80	83.18	70.00	882.95
Cameron, E. I.	Davenport.	.....	8,654	1,594	534.80	.....	.....	498.24	100.00	15.99	50.00	833.08
Burch, LeRoy.	Cedar Rapids.	.....	8,445	1,891	583.00	.....	.....	583.60	100.00	83.57	75.00	140.11
Whitney, A. E.	Fayette.	.....	2,535	1,214	374.70	.....	.....	374.70	100.00	69.59	25.00	94.06
Santee, R. A.	Cedar Falls.	.....	1,141	1,073	221.40	.....	.....	221.40	92.85	9.49	15.00	155.98
Morgan, S. W.	Marshalltown.	.....	2,354	845	330.80	112	4.48	8 5.82	100.00	14.89	17.00	92.16
Rogers, F. B.	Britt.	.....	1,548	943	250.40	.....	.....	2 0.40	100.00	34.80	9.50	.....
Chantland, Thos.	Badger.	.....	1,508	800	280.60	.....	.....	230.70	65.00	33.79	80.00	.....
+Scott, W. J.	Ida Grove.	8	849	254	110.80	.....	.....	110.80	18.57	75.03	40.00	81.57
Brown, Ed. O.	Sioux City.	.....	1,939	1,208	314.20	440	17.60	296.60	100.00	25.11	7.40	184.79
Currie, J. B.	Council Bluffs.	.....	1,631	1,018	243.90	.....	.....	243.90	100.00	48.59	60.00	121.25
Shivers, H.	Creston.	.....	1,406	1,754	216.40	38	1.52	216.40	100.00	38.43	.....	.....
Total.	Knoxville.	4	28,300	14,981	4,816.50	1,512	60.48	\$ 4,255.02	\$ 1,871.57	\$ 462.55	\$ 548.90	\$ 1,907.94

\* Fees and expenses of O. S. Rogers exceeded amount collected by \$32.80.

† Fees and expenses of W. J. Scott exceeded amount collected by \$5.14.

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF NOVEMBER, 1904.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspector.		Rebate.		Total amount of fees received by the state.	Expenses.				
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.		Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.	Paid Inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and drivers.
Pickell, H. M.	Des Moines.	.....	4,298	1,755	\$ 599.30	.....	\$ 9.36	\$ 150.00	\$ 28.70	\$ 75.00	\$ 345.60
Rogers, C. S.	Mt. Pleasant.	.....	2,317	504	\$ 902.10	234	234	100.00	38.49	70.00	64.25
Cameron, E. I.	Davenport.	.....	2,483	1,345	\$ 480.80	885	885	100.00	20.46	50.00	274.44
Burch, LeRoy.	Cedar Rapids.	.....	2,452	635	\$ 342.20	.....	.....	100.00	23.53	75.00	143.67
Whitney, A. E.	Fayette.	.....	1,552	625	\$ 217.70	.....	.....	100.00	91.83	25.00	14.48
Santee, R. A.	Cedar Falls.	.....	1,414	957	\$ 237.10	.....	.....	100.00	98.78	19.99	84.83
Korgan, B. W.	Marshalltown.	.....	2,555	.....	\$ 255.50	.....	.....	100.00	26.41	25.00	119.09
Rogers, F. S.	Britt.	.....	2,029	680	\$ 270.40	127	127	100.00	26.41	25.00	85.08
Chambers, W. J.	Badger.	.....	1,589	545	\$ 218.20	.....	.....	100.00	38.84	8.50	90.71
Scott, W. J.	Iowa City.	.....	1,660	513	\$ 218.20	.....	.....	100.00	42.35	43.87	80.00
Witch, W. A.	Sioux City.	.....	8,550	2,182	\$ 568.80	520	520	100.00	78.15	40.00	83.28
Brown, Ed.	Council Bluffs.	1	8,804	887	\$ 289.10	.....	.....	100.00	43.22	.....	125.48
Carrie J. B.	Creston.	.....	1,789	352	\$ 218.10	.....	.....	100.00	38.96	6.80	76.77
Shivers, H.	Knoxville.	.....	2,863	254	\$ 311.70	66	66	100.00	38.64	60.00	82.42
Total.....		1	38,569	11,479	\$ 4,504.90	1,832	1,832	\$ 1,413.88	\$ 572.29	\$ 556.10	\$ 1,889.85

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF DECEMBER, 1904.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.			Rebates.			Total amount of fees received by the state.	Expenses.			
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.		Paid Inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.	Net amount to credit of state after fees and expenses paid.
Pickell, H. M.	Des Moines.	.....	4,876	1,870	\$ 574.80	....	.....	\$ 574.80	\$ 150.00	\$ 31.41	\$ 75.00	\$ 318.19
Rogers, C. S.	Mt. Pleasant.	.....	2,940	1,540	418.00	.....	.....	348.08	100.00	34.83	70.00	388.83
Cameron, E. I.	Daytonport.	.....	2,854	1,846	258.10	.....	.....	338.08	100.00	28.19	50.00	288.83
Barth, LeRoy.	Oskawville.	.....	2,788	1,846	258.10	.....	.....	338.08	100.00	28.19	50.00	288.83
*Whitney, A. E.	Daytonport.	.....	1,788	847	216.40	.....	.....	238.90	100.00	48.08	70.00	78.94
Santee, R. W.	Daytonport.	.....	1,575	847	216.40	.....	.....	238.90	100.00	48.08	70.00	78.94
Morgan, F. W.	Oskawville.	.....	2,575	847	216.40	.....	.....	238.90	100.00	48.08	70.00	78.94
Rogers, F. B.	Marshalltown.	.....	2,580	459	275.80	.....	.....	275.80	100.00	18.91	25.00	187.19
Scott, W. J.	Badger.	.....	1,680	578	258.80	.....	.....	258.80	100.00	48.12	30.00	160.68
Christ and Thos.	Ida Grove.	.....	1,687	778	238.60	.....	.....	238.60	100.00	30.06	6.50	108.64
Scott, W. J.	Stout City.	.....	1,687	685	337.90	.....	.....	337.90	100.00	17.80	30.00	81.43
Walsh, W. A.	Connell Bluffs.	.....	2,004	907	231.10	.....	.....	231.10	100.00	17.80	40.00	133.64
Brown, Ed. C.	Greston.	.....	2,043	907	185.80	.....	.....	185.80	83.80	27.25	.....	102.96
Currie, J. B.	Knorrville.	.....	2,981	686	355.70	.....	.....	355.70	100.00	31.53	60.00	162.01
Shivers, H.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	.....	.....	81,852	10,227	\$ 4,157.90	1,946	\$ 77.84	\$ 4,080.06	\$ 1,412.93	\$ 418.82	\$ 532.90	\$ 1,694.74

\*Fees and expenses of A. E. Whitney were \$8.73 in excess of fees received.

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF JANUARY, 1905.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Expenses.			
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.		Paid inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.	Net amount to credit of state after fees and expenses paid.
Pickell, H. M.	Des Moines	.....	8,167	1,709	\$ 437.60	330	\$ 13.20	\$ -87.60	\$ 150.00	\$ 14.32	\$ 75.00	\$ 247.73
Rogers, C. S.	Mount Pleasant	.....	2,690	1,778	870.60	880	32.20	957.40	100.00	48.64	70.00	143.76
Cameron, E. I.	Davenport	.....	3,627	1,238	485.50	880	32.20	450.30	100.00	16.46	60.00	278.81
Burch, LeRoy	Cedar Rapids	.....	2,112	1,507	261.90	880	32.20	261.90	100.00	21.98	75.00	64.92
Whitney, A. E.	Payette	.....	2,928	1,900	311.60	880	32.20	311.60	100.00	5.68	75.00	83.92
Santee, R. A.	Cedar Falls	.....	1,232	455	168.70	880	32.20	168.70	100.00	10.17	25.00	53.86
Morgan, S. W.	Marshalltown	.....	2,549	1,074	310.60	291	11.64	310.60	100.00	13.29	15.00	182.31
Rogers, F. B.	Britt	.....	1,560	557	293.40	291	11.64	251.76	100.00	30.88	80.00	90.88
Chantland, Thos.	Badger	.....	2,053	834	239.20	291	11.64	239.20	97.30	47.64	9.50	84.86
Scott, W. J.	Ida Grove	.....	1,495	393	177.40	514	20.56	177.40	81.85	32.56	80.00	32.99
Weich, W. A.	St. Louis City	.....	1,824	1,289	311.80	514	20.56	290.74	100.00	21.16	40.00	129.59
Cousins, L. B.	Council Bluffs	.....	1,587	538	212.60	181	5.24	212.60	90.82	19.88	...	102.00
Currie, J. B.	Creston	.....	2,113	425	263.90	181	5.24	263.90	100.00	93.52	8.66	108.68
Shilvers, H.	Knoxville	.....	3,690	613	480.80	181	5.24	423.06	100.00	33.43	60.00	231.63
Total			82,811	10,083	\$ 4,234.40	2,146	\$ 85.84	\$ 4,196.86	\$ 1,392.44	\$ 395.00	\$ 573.15	\$ 1,830.97

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF FEBRUARY, 1905.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Expenses.			
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.		Paid Inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.	Net amount to credit of state after fees and expenses paid.
Pickell, H. M.	Des Moines	185	8,612	1,186	493.80	185	\$ 7.40	\$ 485.90	\$ 150.00	\$ 46.23	\$ 75.00	\$ 214.62
Rogers, O. S.	Mt. Pleasant	...	2,175	1,049	322.40	256	11.44	310.96	100.00	27.96	70.00	118.60
Cameron, E. I.	Davenport	...	2,536	1,067	423.30	725	29.00	396.30	100.00	14.14	50.00	230.16
Burch, Letoy	Cedar Rapids	...	1,425	1,218	264.90	...	...	294.90	100.00	95.17	75.00	64.18
Whitney, A. E.	Fayette	...	2,498	1,838	883.70	...	...	382.00	100.00	42.62	75.00	164.98
Santee, E. A.	Cedar Falls	...	1,421	1,224	261.50	...	...	264.50	100.00	18.55	25.00	120.95
Morgan, S. W.	Marshalltown	...	1,204	859	276.80	...	...	204.80	89.07	14.25	15.00	85.93
Rogers, F. B.	Britt	...	2,102	255	285.70	187	7.88	327.52	96.42	62.99	90.00	48.41
Chantland, Thos.	Badger	...	1,467	839	280.60	...	...	280.60	96.15	48.11	8.00	81.84
Scott, W. J.	Ida Grove	...	1,163	514	167.70	...	...	167.70	79.42	23.54	30.00	29.74
Welch, W. A.	Sioux City	...	2,091	1,442	853.80	250	10.00	943.80	100.00	83.16	40.00	168.71
Cousins, L. B.	Council Bluffs	...	2,259	477	278.60	...	...	278.60	100.00	...	...	173.60
Carrie, J. B.	Oreston	...	1,492	596	207.80	...	...	207.80	89.45	...	...	86.30
Slivers, H.	Knoxville.	...	2,868	416	337.40	51	2.04	325.36	100.00	40.59	60.00	124.77
Total	...	185	28,843	18,020	\$ 4,154.90	1,694	\$ 67.76	\$ 4,087.04	\$ 1,892.51	\$ 442.34	\$ 553.00	\$1,682.19

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF MARCH, 1915.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.		Rebates.		Total amount of fees received by the state.	Expenses.		Net amount to credit of state after fees and expenses paid.
		Oil rejected.	Oil approved.	(Gallonage rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.	Paid inspectors.	Paid to deputies and branders.
Pickell, H. M.	Des Moines.		8,589	1,985	\$ 532.40	313	\$ 12.62	\$ 150.00	\$ 75.00
Rogers, C. S.	Mt. Pleasant.		1,871	1,660	233.10	230	9.20	100.00	70.00
Cameron, E. I.	Davenport.		2,816	1,778	459.40	847	33.88	100.00	80.00
Burch, LeRoy.	Cedar Rapids.		2,790	1,851	408.10			100.00	75.00
Whitney, A. E.	Fayette.		2,663	399	296.20			100.00	75.00
Sauter, R. A.	Cedar Falls.		1,680	702	244.20			100.00	75.00
Morgan, S. W.	Marshalltown.		2,180	644	802.40			100.00	75.00
Rogers, F. B.	Britt.	236	1,901	1,125	266.50	207	8.28	100.00	80.00
Chantland, Thos.	Badger.		1,536	1,164	250.00			100.00	80.00
Scott, W. J.	Iola Grove.		1,496	1,563	201.90			100.00	80.00
Welch, W. A.	Sioux City.		2,916	1,280	619.50	83	17.32	100.00	40.00
Cousins, L. B.	Council Bluffs.		2,018	805	282.80			100.00	30.00
Currie, J. B.	Creston.		1,662	914	236.60			100.00	40.87
Shivers, H.	Knoxville.		6,810	1,085	434.50	47	1.88	100.00	29.86
Total		236	82,997	14,668	\$ 4,780.10	2,077	\$ 88.08	\$ 1,437.57	\$ 551.50
								\$ 488.73	\$ 2,161.52

REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF APRIL, 1903.

Inspector.	Address.	No Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Expenses.			
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount	Number barrels shipped out of state.	Rebate of 4 cents per bar. rel on goods shipped out of state.		Paid inspectors fees.	Inspectors ex- penses paid by the state.	Paid to deputies and branders.	Net amount to credit of state after fees and expenses paid.
Pickell, H. M.	Des Moines	1,968	2,027	399.50		221	8.84	899.50	187.98	16.86	75.00	171.26
Rogers, O. S.	Mt. Pleasant	1,259	1,008	226.70		686	27.44	217.96	94.18	24.42	70.00	56.26
Cameron, E. I.	Davenport	2,037	2,057	409.40				381.96	100.00	11.66	50.00	230.80
Burch, LeRoy	Cedar Rapids	1,935	1,684	252.90				252.90	100.00	14.64	75.00	63.26
Whitney, A. F.	Fayette	1,189	1,108	227.70		96	9.50	228.90	98.48	25.15	75.00	90.32
Santee, R. A.	Cedar Falls	512	1,122	163.40				163.40	78.85	7.92	25.00	53.13
Morgan, S. W.	Marshalltown	2,295	1,079	834.40				834.40	100.00	12.35	10.00	212.06
Rogers, F. B.	Britt	1,500	988	257.80		282	11.28	246.52	100.00	38.16	81.00	78.86
Chandland, Thos.	Badger	1,018	1,386	138.60				189.60	72.15	20.06	9.50	96.90
Scott, W. J.	Ida Grove	738	656	144.90				144.90	73.72	24.12	90.00	17.06
Welch, A.	Sioux City	2,114	1,541	366.50		348	18.92	351.68	100.00	36.60	40.00	174.98
Cousins, L. E.	Council Bluffs	1,290	1,283	251.80				251.80	100.00	73.77	40.00	77.53
Currie, J. B.	Oreston	638	1,469	110.20				110.20	65.05	18.16	60.00	31.99
Shivers, H.	Knoxville	1,640	1,046	268.60		78	2.92	265.68	100.00	18.77	60.00	86.91
Total.		19,520	16,989	8,650.90		1,705	68.20	8,482.70	1,814.26	866.68	546.50	1,282.31

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF MAY, 1906.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Paid Inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.	Net amount to order of state and expenses paid.
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.					
Pickell, H. M.	Des Moines.	.....	2,088	1,964	408.00	.....	.....	408.00	188.25	17.90	75.00	\$ 172.45
Rogers, C. B.	Mt. Pleasant.	.....	1,035	1,456	244.90	216	8.64	293.26	98.78	15.04	70.00	52.49
Cameron, E. I.	Davenport.	.....	1,685	2,119	575.50	824	32.96	543.54	100.00	9.88	50.00	133.19
Burch, Lakoy	Cedar Rapids	.....	1,199	1,208	240.70	.....	.....	240.70	77.97	7.88	72.00	60.06
*Whitney, A. E.	Payette.	.....	1,087	438	154.90	.....	.....	154.90	76.78	19.81	72.00	.....
Santee, E. A.	Cedar Falls.	.....	939	927	185.50	.....	.....	185.50	84.15	10.70	25.00	63.75
Morgan, E. W.	Marshalltown.	.....	1,878	1,078	244.50	.....	.....	244.50	98.82	4.92	10.00	120.65
Rogers, F. B.	Bader.	.....	1,823	1,554	227.50	212	8.48	217.22	94.50	24.45	30.00	63.97
Chantland, J.	Ida Grove.	.....	1,857	1,552	238.30	.....	.....	238.30	79.87	18.41	30.00	102.15
Scott, W. J.	Sioux City.	.....	1,136	1,955	208.50	384	14.16	210.04	72.23	37.22	40.00	18.27
Welsh, W. A.	Council Bluffs.	.....	1,480	975	184.00	.....	.....	184.00	80.13	10.42	.....	112.82
Consius, L. B.	Oreston.	.....	1,483	975	184.00	.....	.....	184.00	84.00	16.42	.....	112.82
Currie, J. B.	Knoxville.	.....	1,272	1,168	243.50	52	1.28	243.52	98.98	63.06	60.00	62.99
Shivers, H.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.76
Total	.....	17,247	16,218	\$ 8,346.50	1,668	\$ 65.52	\$ 8,280.98	\$ 1,880.24	\$ 811.56	\$ 549.50	\$ 1,104.82	

\*Fees and expenses of A. E. Whitney exceeded amount collected by \$14.64.

## REPORT OF INSPECTIONS, SALARY AND EXPENSES FOR THE MONTH OF JUNE, 1908.

Inspector.	Address.	No. Barrels Inspected and Fees Received by Inspectors				Rebates.		Total amount of fees received by the state.	Expenses.			
		Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.		Paid Inspectors fees.	Inspectors expenses paid by the state.	Paid to deputies and branders.	Net amount to credits of state after fees and expenses paid.
Pickell, H. M.	Des Moines.		1,213	\$ 297	\$ 451.00	229	\$ 9.12	\$ 451.00	\$ 150.00	\$ 28.08	\$ 75.00	\$ 202.82
Rogers, C. S.	Mt. Pleasant.		1,599	1,681	829.00	1,078	43.92	318.83	100.00	30.23	70.00	118.68
Cameron, E. I.	Davenport.		1,882	8,794	561.60			518.68	100.00	8.26	50.00	890.43
Burch, LeRoy.	Oscar Rapids.		974	2,775	374.90			874.90	100.00	20.28	75.00	170.63
Whitney, A. E.	Fayette.	10	1,866	2,355	439.10			439.10	100.00	28.60	75.00	210.50
Santee, R. A.	Oscar Falls.		477	1,533	230.00			230.00	95.00	10.48	25.00	99.57
Morgan, B. W.	Marshalltown.		1,849	1,833	338.30	7	28	337.92	100.00	12.61	10.00	218.31
Rogers, F. B.	Britt.		935	1,852	253.70	114	4.50	242.14	100.00	84.52	30.00	84.03
Chantland, Thos.	Badger.		679	1,771	245.00			245.00	98.75	29.61	9.50	107.14
Scott, W. J.	Ida Grove.		787	1,198	196.50			196.50	86.62	21.08	80.00	88.90
Welch, W. A.	Sioux City.		1,401	1,906	320.70	455	18.20	802.50	100.00	86.95	40.00	125.55
Cousins, L. B.	Council Bluffs.		860	1,090	255.00			255.00	100.00	7.55	28.03	147.45
Currie, J. B.	Oreston.		933	1,053	200.60			200.60	87.65	28.68	.....	84.82
Shivers, H.	Knoxville.		1,579	1,117	269.80	82	1.23	268.58	100.00	85.35	60.00	73.97
Total.		10	17,054	27,415	\$ 4,447.90	1,909	\$ 76.36	\$ 4,371.54	\$ 1,418.03	\$ 377.80	\$ 549.50	\$ 2,026.23

**CONSOLIDATION OF INSPECTIONS BY MONTHS FOR THE YEAR BEGINNING  
JULY 1, 1903, AND ENDING JUNE 30, 1904.**

Month.	No. bbls. oil rejected.	No. bbls. oil approved.	No. bbls. gaso- line rejected for illumina- ting purposes	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, brand- ing barrels.
<b>1903</b>								
*July .....	6	13,442	20,159	\$3,860.70	\$1,294.94	\$ 913.85	\$1,155.32	\$ 612.75
August .....		25,906	16,888	4,279.40	1,359.18	1,069.66	1,861.58	612.75
September .....	187	24,943	14,606	3,968.60	1,331.28	1,008.03	1,629.29	612.75
October .....	65	80,197	18,316	4,357.82	1,865.77	1,114.60	1,877.43	612.75
November .....	124	82,838	6,387	3,932.90	1,327.86	1,177.88	1,427.16	606.25
December .....		28,185	8,971	3,715.60	1,302.86	1,147.38	1,265.86	606.25
<b>1904</b>								
January .....		23,890	10,334	3,572.40	1,285.78	1,094.80	1,191.82	606.25
February .....	4	23,887	11,233	3,515.40	1,284.85	1,089.82	1,140.64	611.25
March .....		27,394	10,253	3,764.70	1,317.99	1,166.53	1,230.13	611.25
April .....		22,459	11,549	3,400.80	1,266.46	972.12	1,162.22	611.00
May .....	123	17,411	20,550	3,808.40	1,357.39	987.85	1,468.66	611.00
*June .....		14,732	18,733	3,846.50	1,287.82	947.45	1,112.46	606.00
<b>Total .....</b>	<b>450</b>	<b>286,784</b>	<b>162,989</b>	<b>\$45,023.20</b>	<b>\$15,781.19</b>	<b>\$12,694.53</b>	<b>\$16,567.07</b>	<b>\$ 7,323.25</b>

\*Salary and expenses of W. J. Scott for July, 1903, and June, 1904, exceeded fees collected by \$9.64.

**CONSOLIDATED REPORT OF INSPECTIONS BY MONTHS FOR THE YEAR BEGINNING JULY 1, 1904, AND ENDING JUNE 30, 1905.**

	Month.					
	No. Barrels Inspected and Fees Received by Inspectors.	Expenses.		Rebates.		Total amount of fees received by the state.
	Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of cents per barrel on goods shipped out of state.
1904						
July.....	18,980	20,728	\$ 3,471.60	1,669	66.76	\$ 404.84
August.....	20,235	21,467	4,172.20	1,940	77.60	4,094.60
September.....	20,847	20,938	5,023.70	1,806	72.24	4,956.46
October.....	28,200	14,951	4,815.50	1,512	60.48	4,255.02
November.....	33,569	11,479	4,504.90	1,892	73.28	4,431.62
December.....	31,352	10,227	4,157.90	1,946	77.84	4,080.06
1905						
January.....	82,811	10,038	4,294.40	2,146	86.84	4,198.56
February.....	28,349	18,020	4,154.80	1,694	67.76	4,047.04
March.....	82,897	14,668	4,790.10	2,077	83.06	4,617.02
April.....	19,520	15,969	8,550.90	1,705	68.20	8,482.70
May.....	17,247	16,218	8,946.50	1,688	65.52	8,290.98
June.....	17,064	27,415	4,447.90	1,909	76.86	4,371.54
Total.....	304,065	197,151	\$50,165.40	21,874	\$74.96	\$49,280.44
Reconciliation—deduct excess of expenses over fees collected, as shown by monthly reports for the year.....						\$ 4,966.16
Net balance to credit of the state.....						\$ 6,800.43
						\$ 320,921.88
						\$ 56.31
						\$20,862.52

CONSOLIDATION OF INSPECTIONS, SALARY AND EXPENSES OF EACH INSPECTOR FOR THE YEAR ENDING JUNE 30, 1904. ALSO PER CENT OF EXPENSES AND AMOUNT PAID TREASURER OF STATE, RELATIVE TO AMOUNT OF FEES RECEIVED.

Inspector.	Address.	No barrels oil rejected	No. barrels oil approved.	No. barrels gasoline rejected for illuminating purposes	Amount of fees received.	Amount of fees retained.	Expense.	Amount paid to treasurer of state.	Amount paid deputy and helper, branding barrels.	Percent of expenses to amount of fees received.	Percent of amount paid the state to amount of fees received.
Pickell, H. M.	Des Moines.	...	28,843	15,898	\$ 4,423.60	\$ 1,200.00	\$ 1,155.90	\$ 2,027.70	\$ 900.00	26.35	48.51
Rogers, O. S.	Mt. Pleasant.	10	20,220	12,841	8,259.10	1,170.25	1,294.96	2,785.59	840.00	30.69	24.35
Cameron, E. J.	Davenport.	...	31,580	16,157	4,810.70	1,200.00	1,187.24	2,423.46	1,020.00	24.68	54.37
Burch, L. Roy.	Oscar Rapids.	137	21,748	13,958	8,084.10	1,183.10	1,175.43	1,225.57	900.00	31.79	84.19
Whitney, A. E.	Fayette.	...	20,522	9,895	8,084.10	1,094.73	1,217.08	1,562.94	900.00	45.97	18.55
Sanfey, R. A.	Oscar Falls.	...	14,664	13,213	2,737.70	1,123.60	518.45	1,145.65	300.00	13.61	41.00
Morgan, S. W.	Marshalltown.	...	24,484	11,538	3,573.70	1,200.00	840.17	2,036.53	120.00	9.51	56.93
Rogers, F. B.	Britt.	...	15,290	10,677	2,597.60	1,085.48	655.84	864.78	145.00	25.22	82.90
Chandler, Thos.	Badger.	...	15,846	10,793	2,636.90	1,192.50	578.64	975.76	164.00	21.74	86.72
Scott, W. J.	Lida Grove.	5	13,804	6,145	1,995.40	1,200.00	864.79	201.48	880.00	42.83	10.09
Welch, W. A.	Sioux City.	185	22,538	13,932	3,460.50	1,200.00	1,167.73	1,301.77	554.25	31.82	55.44
Brown, Ed. O.	Council Bluffs.	...	15,562	8,731	2,429.00	1,024.17	532.81	888.12	180.00	21.49	59.34
Currie, J. B.	Owston.	122	15,375	9,023	2,459.00	1,048.54	476.95	926.51	120.00	19.45	57.77
Shivers, H.	Knorrville.	...	26,529	10,927	3,745.60	1,200.00	1,370.64	1,163.96	810.00	36.86	81.12
Total.		459	286,784	162,869	\$ 45,023.20	\$ 15,781.19	\$ 12,684.56	\$ 16,567.07	\$ 7,823.25	28.17	86.79

\* Fees and expenses of W. J. Scott for July, 1903, and June, 1904, exceeded amount of fees received by \$9.64.

CONSOLIDATION OF INSPECTIONS, SALARY AND EXPENSES OF EACH INSPECTOR INCLUDING INSPECTORS' FEES FOR THE YEAR  
ENDING JUNE 30, 1906, ALSO PER CENT OF EXPENSES AND AMOUNT TO CREDIT OF THE STATE RELATIVE TO AMOUNT OF  
FEES RECEIVED.

Inspector.	No. Barrels Inspected and Fees Received by Inspectors.				Rebates.		Total amount of fees received by the state.	Expenses.				Per cent of expenses to amount of fees received.	Per cent of amount paid to state to cover.
	Oil rejected.	Oil approved.	Gasoline rejected.	Total amount of fees.	Number barrels shipped out of state.	Rebate of 4 cents per barrel on goods shipped out of state.		Paid to inspectors.	Inspectors' expenses paid by the state.	Paid to dealers and branders.	Net amount to credit of state after fees and expenses paid.		
Pickell, H. M.	186	88,818	24,644	\$ 5,894.80	498	\$ 19.92	\$ 5,844.88	\$ 1,760.00	\$ 890.91	\$ 900.00	\$ 2,893.91	51.70	48.30
Rogers, C. B.	.....	21,374	18,432	3,690.60	8,190	128.66	3,357.00	1,169.81	414.27	840.00	3,895.72	72.26	27.74
Barth, E. I.	.....	30,838	24,155	3,561.80	9,728	389.12	5,112.18	1,200.00	161.74	715.00	8,085.44	40.62	59.38
Barth, LeRoy	.....	24,946	15,714	4,005.00	.....	.....	4,006.00	1,197.67	941.64	900.00	1,596.69	60.80	39.11
Whitney, A. E.	10	23,793	11,085	9,439.10	25	10.00	8,479.10	1,123.55	448.57	900.00	1,530.85	70.80	29.11
Starkes, A.	.....	18,971	18,996	2,798.70	.....	.....	2,798.70	1,112.75	152.04	900.00	1,231.86	15.95	44.05
Morgan, S. W.	.....	22,624	11,122	5,374.90	152	6.08	3,368.82	1,187.74	188.87	150.00	1,882.41	45.81	54.19
Rogers, F. B.	236	17,842	11,881	2,915.90	1,718	68.72	2,927.18	1,177.94	501.23	908.00	1,245.02	58.55	41.45
Chantland	.....	16,716	12,397	2,948.50	.....	.....	2,178.30	991.99	965.25	880.00	1,638.72	78.94	21.16
Scott, W. J.	1	18,515	8,397	2,178.80	.....	.....	4,017.92	1,197.80	499.90	467.00	1,558.72	54.87	45.13
Walch, W. A.	2	24,947	17,495	4,244.40	5,662	220.48	3,059.80	1,166.87	292.86	40.00	1,550.27	60.08	39.92
Conning, L. B.	.....	18,070	12,824	3,039.30	.....	.....	2,431.40	1,046.69	335.11	50.45	1,969.75	61.80	38.20
Currie, J. B.	.....	15,103	9,211	2,431.40	.....	.....	3,833.46	1,198.88	490.90	730.00	1,434.48	61.80	38.20
Shivers, H.	.....	27,089	11,556	3,894.34	776	31.04	.....	.....	.....	.....	.....	.....	.....
Total.	438	304,065	187,151	\$ 50,165.40	21,874	\$ 874.96	\$ 49,390.44	\$ 16,661.32	\$ 4,966.16	\$ 6,800.45	\$20,921.83	57.49	42.51
Reconciliation—deduct excess of expenses over fees received as shown by monthly reports	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59.81	.....	.....
Net balance to the credit of the state	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$2,862.52	.....	.....



# SECOND REPORT

OF THE

## Iowa Library Commission

1903-1905

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Published by Authority of the General Assembly

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DES MOINES  
G. MURPHY STATE PRINTER

## IOWA LIBRARY COMMISSION.

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**OFFICE:** State House, Des Moines.

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**OBJECT:** To aid in the establishment and development of free and other public libraries in the State of Iowa.

### MEMBERS EX-OFFICIO.

JOHNSON BRIGHAM, State Librarian, *President*.

GEORGE E. MACLEAN, President State University.

JOHN F. RIGGS, State Superintendent Public Instruction.

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### MEMBERS APPOINTED BY THE GOVERNOR.

MRS. HORACE M. TOWNER, Corning.

MRS. DAVID W. NORRIS, Grinnell.

MRS. HENRY J. HOWE, Marshalltown.

CAPT. W. H. JOHNSTON, Ft. Dodge.

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MISS ALICE S. TYLER, *Secretary*.

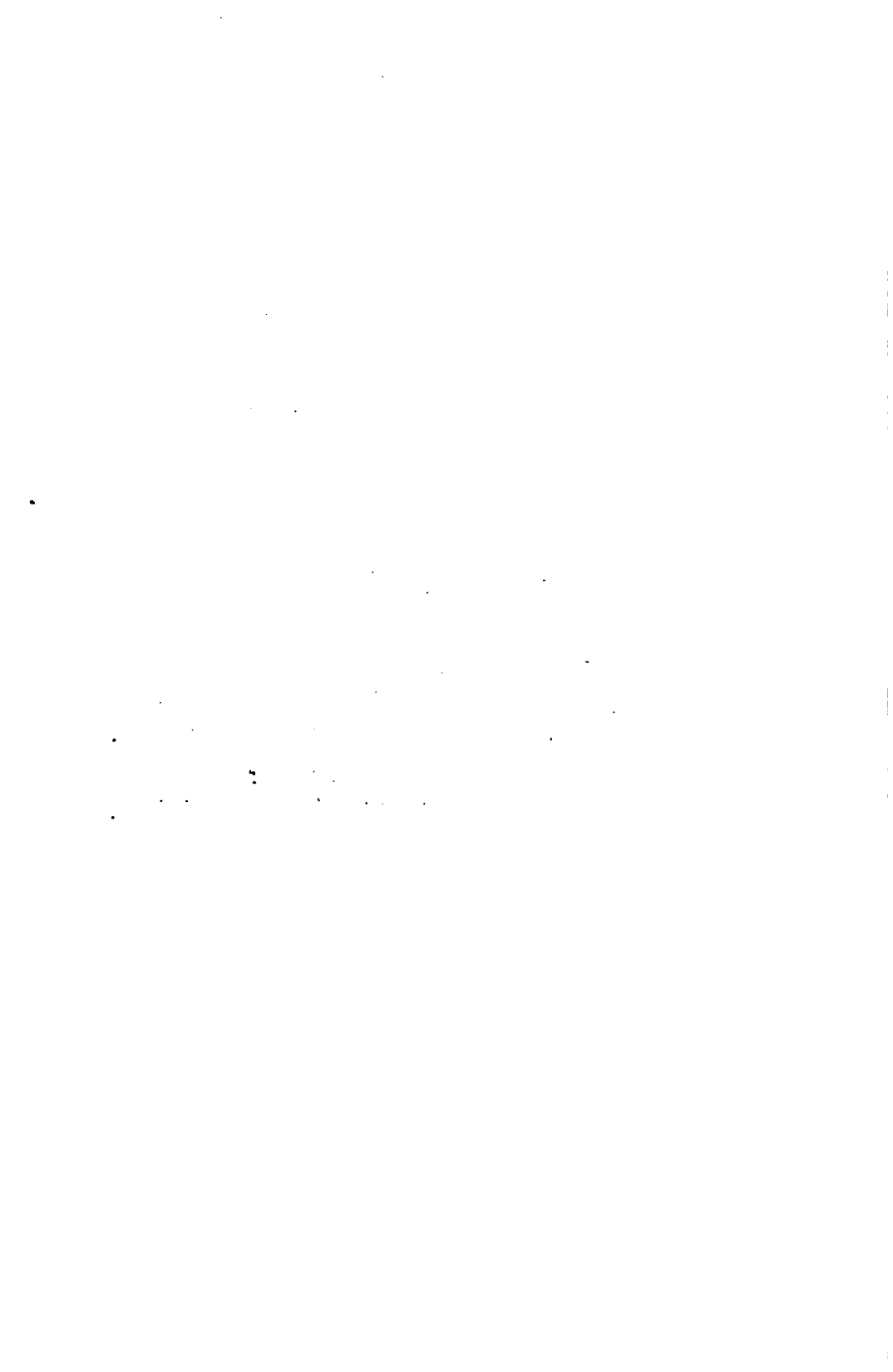
## LETTER OF TRANSMITTAL.

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TO HONORABLE ALBERT B. CUMMINS, GOVERNOR OF IOWA:

In compliance with Section 5, Chapter 173, Laws of the 29th General Assembly, I herewith transmit the second report of the Iowa Library Commission.

ALICE S. TYLER,  
*Secretary Iowa Library Commission.*



# STATE OF IOWA

## LIBRARY COMMISSION.

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The forward movement of library affairs in the state of Iowa during the biennial period covered by this report has been steady, and permanence and stability characterize the present condition of the work. The impetus given by the erection of new buildings, as noted in the previous report, has been felt during this period, and the free public libraries of the state are now developing plans for future growth under the conditions which the occupancy of a building of their own creates for permanency and service.

It has seemed to be the immediate task of the Library Commission to forward the interests of the free public libraries first, and aid in their establishment, because of the close connection of free libraries with the welfare of the communities in which they exist as centers for popular education, although the broad field of service which opens up for the future is indicated by the fact that the duties of the Commission include the giving of "advice and counsel to all free and other public libraries and to all communities which may propose to establish them".

The Iowa Library Commission has kept in touch with the trend of library development in the United States as represented in the American Library Association, a national organization of far-reaching importance and with a membership and a record of service in the development of the public library movement which has placed this country in the recognized position of leading in this modern educational work.

Inasmuch as the activities of a library commission are largely those of developing library work in communities where there is little knowledge of the services which a public collection of books may render, the work takes on something of a missionary phase; hence commission workers are especially interested in the problems affecting the creation of library sentiment, the beginnings of a library, the difficulties of maintaining a library on limited funds, the prime importance of careful selection of the books purchased, the necessity for enthusiastic and intelligent conduct of the library by the trustees and librarian and many similar matters, that, though small of themselves, assume large proportions in the effort to establish these centers of information and culture with meager funds in small communities. The desire of commission workers to come together to discuss these problems and to cooperate in solving them led to the organization of the League of

Library Commissions, a national organization affiliated with the American Library Association, composed of the representatives of the various state commissions and other state agencies which exist for purposes of library extension. The Secretary of the Iowa Library Commission has been active in promoting this organization, believing that it will be of great practical service to the Commission with which she is associated, and she now serves as Secretary of this national organization.

The Iowa Library Commission has been represented at the annual meetings of the American Library Association by the President of the Commission, Johnson Brigham and by the Secretary and at the meeting in 1904 at St. Louis, where the American Library Association meeting was one of unusual importance on account of the World's Fair, the Commission was also represented by Mrs. Towner, Mrs. Norris, Mrs. Howe and Capt. Johnston. A meeting of the Library Commission was held there at the time on account of the meeting of the Iowa Library Association being held there, several of the Middle West state associations holding their meetings at the same time and place.

During the period covered by this report the terms of three of the Commissioners expired; namely, Mrs. D. W. Norris, July 1, 1903, Mrs. Jessie Waite Davidson, July 1, 1904 and Mrs. H. M. Towner, July 1, 1905. Governor Cummins reappointed Mrs. Norris; Mrs. Davidson, finding her home duties required her entire attention, was succeeded by Mrs. H. J. Howe of Marshalltown and Mrs. Towner was appointed to succeed herself. One ex-officio member, Hon. R. C. Barrett, has on account of his retirement from the position of State Superintendent of Public Instruction, been succeeded by Hon. John F. Riggs. During the period meetings of the Commission have been held as follows: October 6, 1903 at Marshalltown; December 15, 1903 in Des Moines; May 5, 1904 in Des Moines; October 18, 1904 at St. Louis (in connection with the meeting of the Iowa Library Association and the A. L. A.); March 23, 1905 in Des Moines.

At the Louisiana Purchase Exposition at St. Louis, 1904, the Library Commission made an exhibit of its work of library extension in this state, showing pictures of the new library buildings, maps showing location of libraries, charts with a few statistics and one of the Traveling Libraries. The Commission was gratified to receive the award of a silver medal for this exhibit and a handsome diploma of award setting forth the same.

**New Libraries Established**—The following towns have voted favorably upon the question "Shall a free public library be established" as provided by the state law: Albia, Cresco, Laurens, Pella, Spirit Lake, Storm Lake, Tama and West Branch. At Maxwell and DeWitt free public libraries established in 1901 were not included in our former report. At Mt. Vernon the citizens have the free use of the Cornell College library for which Mr. Carnegie provided a \$50,000 building and inasmuch as it was necessary to provide for the support of the library by both the college and town, the library law was amended by the 30th General Assembly providing for this joint support.

A local library association is often the beginning of a movement which eventually develops into a free public library, and the Commission has encouraged the organization of these associations as a first step toward the voting of a municipal tax. Such associations have been formed at Anthon, Bedford, Clarinda, Creston, Lake City, Norwalk and Parkersburg.

**Library Buildings**—In the former report a list of gifts of library buildings to the state from Mr. Andrew Carnegie and from Iowa citizens showed a total amount given for the erection of these buildings in the state previous to July 1, 1903, to be \$1,268,200. Since that date the following gifts have been announced, Webster City and West Branch being gifts from citizens of those towns:

Albia	Free Public Library	\$ 10,000
Cherokee	Free Public Library	10,000
Colfax	Free Public Library	5,000
Des Moines	Drake University Library	50,000
Fairfield	Parsons College Library	15,000
Indianola	Simpson College Library	10,000
Leon	Free Public Library	6,000
Nashua	Free Public Library	5,000
Odebolt	Free Public Library	4,000
Osage	Sage Public Library	10,000
Pella	Free Public Library	10,000
Spirit Lake	Free Public Library	6,000
Storm Lake	Free Public Library	10,000
Tama	Free Public Library	7,500
Webster City	Kendall Young Library	50,000
West Branch	Enlow Public Library	2,500
West Liberty	Free Public Library	7,500
Winterset	Free Public Library	10,000

**Gifts From Iowa Citizens**—The most notable gift that has come to an Iowa library is the bequest from the late Kendall Young of Webster City of about \$250,000 to found and maintain the Kendall Young Library. The trustees of this fund were authorized to erect a fire proof building and the income from the remainder of the estate provides a maintenance fund. The building has been erected since our last report was issued, the funds having become available for that purpose, although the library was established in 1898 by Mrs. Young who gave the Young residence as a temporary home for the library. Though the new Kendall Young library building was dedicated after the date of this report, the announcement of the gift and the erection of the building must be recognized as probably the most unique and gratifying library event of the period in the state. The building with equipment and furnishings cost \$50,000 and the income from \$200,000 will be available for maintenance.

Another gift from an Iowa citizen is that of the tasteful little library building at West Branch presented to the town by Mrs. Huldah Enlow and costing about \$2,500. This building was given on condition that the citizens should vote a municipal tax which was promptly done and the library building was dedicated in September, 1904.

**Commission Rooms**—The growing work of the Library Commission and the need of sufficient shelving to properly care for the books of the Traveling Library and for the periodical exchange led the Executive Council of the state to assign rooms in the basement of the State House to the Commission in December 1903. The Commission has greatly appreciated this provision of adequate room for the increased work and already finds the shelf capacity of the rooms taxed to its utmost capacity.

It is the expectation of the Library Commission to occupy the ground floor rooms of the east wing of the new Historical building as soon as it is completed.

**Publications**—Probably the most important publication issued, for which the Commission has any responsibility, is the "Check List of the Publications of the State of Iowa" authorized by the Executive Council and prepared under the supervision of the secretary of the Library Commission. Heretofore no list has been available of the printed matter issued by the various state officers and departments. The Library Commission had made a beginning in the compilation of this list but lack of funds for employing the additional help necessary in its preparation made it impossible to carry out the plans. At this juncture, however, the Executive Council, through its chairman, Governor Cummins, expressed the desire that such a list be prepared and provided for the necessary help. The careful examination of the publications that were accessible, in the entire absence of data in many of the departments, made the difficulties of the work very great. It is gratifying to note the appreciation expressed by the various departments at the State House and by the libraries of the state as to the usefulness of the "Check List".

A "List of Books by Iowa Authors" is a pamphlet of 30 pages issued by the Commission in October 1904. It was compiled by Mrs. Henry J. Howe of Marshalltown, a member of the Library Commission and a member of the Auxiliary Committee from Iowa for the Louisiana Purchase Exposition. The preparation of the list grew out of the efforts of the Committee to bring together a collection of books by Iowa authors for the Iowa State building at St. Louis.

A "List of Books in the Traveling Libraries" was issued late in 1904 and contained lists of titles in 106 of the 50-volume libraries that were in use at that time, affording a means by which patrons could make selections of libraries desired. A number of new libraries have been added since that time and it will be necessary to issue a supplement to this at intervals.

A new edition of the leaflet on "Books for the Blind" has been issued on account of the postal provision for free transportation through the mail for books loaned to the blind and the adding of new titles to the collection.

The Quarterly issued by the Commission continues to be a most useful means of communication with the libraries of the state.

**Library Laws**—The laws which provide for the establishment and maintenance of free public libraries in Iowa have been on our statute books since 1872, but have been modified and enlarged as the needs of these institutions have demanded. There are still many points wherein these laws could be strengthened, and new conditions call for new legislation which will make it possible for Iowa to keep pace with the onward movement of library sentiment in the Middle West. The duties and powers of library trustees need to be stated more fully and explicitly, and the new responsibilities which have arisen in connection with the erection of library buildings through gift or otherwise call for some statement in the law as to this matter.

Township or county support of libraries located in towns and cities easily accessible to residents in the adjacent country has proved successful in other states. It is the hope of the Iowa Library Commission and the Iowa Library Association that such legislation may be provided for Iowa by the 31st General Assembly.

Another matter which many who are interested in Iowa library progress deem worthy of consideration by the General Assembly is the question of the maintenance fund which the law permits as provided in Section 732 of the Code and amended by the 29th General Assembly. Inasmuch as this library tax is permissive and not mandatory it would make it possible for those who are struggling with the difficult problem of maintaining a library on the extremely meager income of most of our libraries to plan for growth if this limit should be placed at three mills on the dollar instead of two mills. The present levy simply enables a small library to exist, but not to grow as it should. With an annual income in many of our libraries of from \$200 to \$1000 per year which must provide absolutely every expense of operating the library, including librarian's salary, the heating and lighting of the room or building, the purchase of books and periodicals, the binding of periodicals, the rebinding of worn books and the employment of a janitor in case the library occupies its own building, it will be seen that there is little provision for real growth so far as the collection of books is concerned and the library must depend on public spirit and philanthropy outside the tax income for more than a limited purchase of much needed books.

Regarding the Library Commission law, the rapid growth of the work in which the Library Commission has been engaged for the past five years is evident to any who have observed library conditions in the state. Library extension or field work, which requires visits and conferences in various parts of the state by a representative of the Commission has grown to such proportions that no one person can in any reasonable degree cover the entire state or meet the requests for personal visits and when in connection with this the various duties in the Commission office are considered, such as records, correspondence, etc., it is evident that these various interests call for more help if they are to be cared for in a satisfactory manner.

By reference to the part of this report devoted to the Traveling Library it will be seen that the work of that important department has more than doubled during the biennial period. With a circulation of books during this biennial period of 58,118 volumes, as compared with 28,927 volumes for the preceding period, and with 995 libraries sent out as compared with 477 for the preceding period with the additional loan of 126 books to the blind it is clear that the work has increased more than 100 per cent.

This condition of affairs has made the work of the Commission office so burdensome that it has been impossible for the very small staff of workers, which our small income provides, to adequately take care of the large amount of work which is daily coming to the Commission office. The need therefore of an additional appropriation to provide for the growing work of the Commission is absolutely necessary for the continuance of the important educational work which the state has committed to the Library Commission. The \$6,000 appropriated annually for all of the work of the Library Commission does not enable the work to be enlarged as it ought. By economy the amount has been made to accomplish a most creditable amount of work, but the increase in the doors of opportunity which have opened and which cannot be entered because of lack of funds, leads the Commission to feel that an increase in the annual income is absolutely essential to the further progress of the work.

**Library Outlook in Iowa**—The outlook for the library interest of Iowa is hopeful. The enthusiastic and confident spirit exhibited in the meetings of the State Library Association each year may be taken as an index to the library sentiment of the state, as this Association is composed of library trustees, librarians and others who are interested in this method of public education. The librarians are realizing more and more the responsibilities of their work and the importance of being prepared to be of service to the people by a thorough knowledge of their books and of technical methods and means of making their collection of books quickly accessible and useful. Trustees are also becoming better informed regarding the aims and methods of the modern library movement.

**Free Access to the books**, on the part of the public has come to be recognized as absolutely essential in bringing about the best use of a public collection of books, for it is evident to any person who uses books either for entertainment or information that it is much more satisfactory to examine the group of books on the shelves rather than to be forced to ask at long range for specific titles, of books which he has not heretofore examined. Furthermore, in connection with the use of books in the free public library, it must be borne in mind that the collection of books belong to the people of the community and the librarian and trustees are simply serving the public in making these books of value to the people who should be permitted to use them with the greatest freedom consistent with the protection and

care of public property. The burden of proof as to permitting the public to have access to their own books rests with those who refuse it.

The selection of books is a subject of the most vital importance to all libraries, but especially to the small library, with limited funds, where the value of every dollar seems doubly enhanced by the effort of the book committee to provide the best books for their library, selected from the enormous output of books each year. With a book fund annually of from \$100 to \$300 and with 8,291 new titles being issued from the press in one year, (1904) it is evident to the most casual observer that some means should be provided for selecting the best out of this large number. The League of Library Commissions has realized this need and the Wisconsin Free Library Commission has for several years prepared a recommended list of recent books which they have generously placed at the disposal of other state library commissions. It has been the hope of the Commission League that the American Library Association would take up this work, inasmuch as it was felt to be a national need rather than a state need and it is gratifying to report that the A. L. A. has recognized this and is now publishing the A. L. A. Book list for the express purpose of providing a selected list of the best new books. This list is issued monthly and the Iowa Library Commission supplies it free to each public library in the state and to a selected list of association and college libraries.

Reports of the work done by each library are required by the state law. Library statistics have been a source of perplexity to many librarians, but there is every evidence of much more care and system in the compiling of statistics and the making of reports than has heretofore existed. Libraries are adopting business methods and the librarian feels that she must be able to make a detailed report to her Board of trustees on the activities of the library in all departments. The Library Commission has used every effort to bring about this condition of affairs by providing report blanks for daily statistics, monthly reports and annual reports, to include all items required to be reported by the state law.

**Endowments**—The problem of the maintenance of free public libraries upon the meager incomes has been mentioned and also the splendid endowment of the Kendall Young library at Webster City. These two facts emphasize the importance of some provision for book funds, either by the creation of an increased maintenance fund or a separate book fund, either by taxation or endowment. A most worthy provision can be made for the benefit of the people of a community by the gift, from those who are blessed with wealth, of a library endowment fund, the income of which shall be used for the purchase of books. Splendid memorials to those who are gone would exist for generations and perpetuate the name of the donor in such gifts, all books purchased from the fund being plainly marked by a book plate showing the source. Higher institutions of learning such as our colleges and universities could not possibly exist if it were not for endowments, as the income

provided through the regular channels is wholly inadequate for the maintenance of these institutions; and surely these "universities of the people" which are open to all, without restrictions as to age or previous preparation, are equally worthy of such generous consideration.

### TRAVELING LIBRARY.

No feature of the Library Commission's activities shows more rapid advance than the work of the Traveling Library. This method of distributing books from a state center to points in the state that for various reasons find it impossible to have a local collection of books for public use has grown to be recognized in very many states as a potent factor in developing more intelligent citizenship. During the biennial period the Traveling Library work has more than doubled and the plan is becoming more generally known throughout the entire state. The collection of books consist of two groups; viz., (a) regular 50-volume libraries of miscellaneous books for general reading, consisting of well selected books in the various classes of literature and (b) books arranged by subject which are drawn upon in varying numbers to supply requests for literature on special subjects.

An exhibit was made at the Louisiana Purchase Exposition in St. Louis in 1904 of the Traveling Library work as well as the general work of library extension carried on by the Commission. A Traveling Library was on exhibition, with printed matter relating thereto for distribution. The award of a silver medal was a gratifying recognition of the modest exhibit made there. An exhibit was also made at the Biennial meeting of the Iowa Federation of Women's Clubs in Waterloo in May, 1905, and much attention was attracted to the work which the Traveling Library is doing, especially in connection with supplying study clubs with books on their various subjects of study. This exhibit of both miscellaneous and subject libraries, maps showing location of centers, charts of statistics, picture bulletins and various suggestive features of library work attracted many interested visitors and has no doubt increased the number of requests that are pouring in for books on special subjects.

**Subject Libraries** are a more recent development of traveling library work than the miscellaneous libraries for general reading. When requests for books on subjects of study are received, the books are selected from the general collection arranged by subject, this collection consisting of over 7,000 volumes classified according to the Decimal classification; the number of books sent varies according to the material available and to the importance of the subject. Hence the size of the subject libraries varies. On the return of these books they are returned to the shelves ready to go out again in other groups according to demand. This feature of our work shows most gratifying results but calls for careful work.

The circulation of books in rural schools selected from the graded list of books prepared by the Board of Educational Examiners of Iowa has been continued and much appreciation has been expressed by the teachers for these books which augment the small collection provided under the library law regarding school district libraries.

A "List of Books in the Traveling Libraries" was issued in 1904 giving list of the titles contained in each of the regular 50-volume libraries, Nos. 1 to 100 inclusive, and also the six juvenile libraries of 50 volumes. This enables the library centers to select the libraries they think most desirable, each library being numbered and a series of desirable numbers being sent in. Since that list was issued several new libraries have been added and a supplementary list will be issued for distribution before a great while.

A splendid field for extending the work is in connection with the Farmer's Institutes and the county system of Y. M. C. A. work which is now being developed in Iowa, but a lack of funds to provide for sufficient help to enter into this work has made it impossible to do more than make a beginning. There is no reason why, if funds were available, there should not be a traveling library exhibited at every county farmers' institute in the state with a personal explanation by a representative of the Library Commission of the plan which the state provides for sending books to the remotest corner of the state with but a trifling cost to those who have the benefit of these books.

Books for the Blind have proven to be a feature of the traveling library work which has brought the most personal and genuine appreciation. The blind readers seem to appreciate the opportunity which the Commission has given them of having access to books in N. Y. Point which they can read themselves. This work was begun as an experiment in 1903 and in our former report the plan was given in detail. At the time the work was begun the Commission undertook to pay transportation on the books because of their earnest desire to do this much needed work, and it is gratifying to report that in June, 1904, the United States postal laws were so amended as to provide for the free transportation of these books through the United States mail. This provision had been urged by librarians for some time and is most gratifying to all who realize how much the use of these books is appreciated by blind readers. Since the last report was issued 27 books for the blind have been added to the traveling library collection.

The office records for operating a Traveling Library must be carefully kept as the distribution of books over such a wide area as a state calls for more information and in a more specific manner than for the circulation of books by a local library. Not only is the selection and arrangement of the books important but the question of geographical distribution, methods of shipping and receipt, the examination of the condition of the books, and various unique features of the work call for records that are accurate to answer the various questions that are likely to arise in connection with the location of the books and their condition. Such records and such oversight of the Traveling Library, even with its present proportions require a larger force of helpers than the Commission can employ with the funds at their disposal and if the work is to increase as it should to keep pace with the spreading desire for knowledge that is in our state an increased force is an absolute necessity.

**Summary of Traveling Library Operations**—At the end of the biennial period the condition of the Traveling Library is as follow : total number of volumes in Traveling Library collection, 18,871. Of these 6,754 volumes are in fixed collections of 50 volumes each for general reading and 7,121 are in the general loan collection which includes books for subject use, the school district collection for use in the schools and books for the blind.

There are 316 centers in agreement with the Commission for the use of the Traveling Library, these centers being located in 84 counties of the state. It will thus be seen that there are still 15 counties that are not taking advantage of the opportunity for books which the state has provided.

There were 995 libraries sent out during the biennial period; 557 of these were the regular numbered libraries and 438 were general loan or subject libraries; 126 books were loaned singly to the blind. There were 18,827 readers reported for these books, the books being used 58,118 times.

The above figures do not fully show the use made of the books as it is difficult to secure full reports from the centers.

#### TRAVELING LIBRARY CENTERS ARRANGED BY COUNTIES.

<b>ADAIR:</b> Greenfield. Adair (2). Fontanelle.	<b>BUCHANAN:</b> Fairbank. Independence (2). Winthrop.	<b>CERRO GORDO:</b> Mason City. Rockwell. Thornton (2).
<b>ADAMS:</b> Corning.	<b>BUTLER:</b> Clarksville. New Hartford.	<b>CHEROKEE:</b> Cherokee (3). Washta.
<b>ALLAMAKEE:</b> Postville (2). Waukon.	<b>CALHOUN:</b> Rockwell City (2). Lake City (2). Lohrville. Pomeroy. Farhamville.	<b>CHICKASAW:</b> Nashua. New Hampton. Osceola.
<b>AUDUBON:</b> Audubon. Exira (2). Irwin.	<b>CATROLL:</b> Coon Rapids (2). Glidden (3). Manning. Ralston.	<b>CLARKE:</b> Ionia.
<b>BENTON:</b> Vinton. Norway. Van Horne. Keystone. Belle Plaine. Blairstown.	<b>CASS:</b> Atlantic. Griswold.	<b>CLAY:</b> Dickens. Peterson. Royal. Spencer.
<b>BLACK HAWK:</b> La Porte City (2). Winslow. Waterloo.	<b>CEDAR:</b> Clarence. Durant. Tipton. West Branch. Mechanicsville. Springdale (2). Centerdale.	<b>CLAYTON:</b> Elkader.
<b>BOONE:</b> Madrid. Beaver. Ogden.		<b>CLINTON:</b> Clinton. De Witt.
<b>BREMER:</b> Sumner.		<b>CRAWFORD:</b> Manilla (3).

- DALLAS:**  
 Dallas Center (2).  
 Linden.  
 Perry.  
 Redfield.  
 Van Meter (2).  
 Waukee.  
 Adel (2).  
 De Soto.
- DAVIS:**  
 Bloomfield (2).
- DECATUR:**  
 Weldon.  
 Lamont.  
 Leon.  
 Garden Grove.  
 Davis City.
- DELAWARE:**  
 Manchester (4).  
 Greeley.
- DES MOINES:**  
 Burlington.  
 Sperry.  
 Danville.
- DICKINSON:**  
 Arnold's Park.  
 Spirit Lake.  
 Milford.  
 Superior.  
 Orleans.
- EMMET:**  
 Estherville.  
 Ringsted.
- FAYETTE:**  
 Oelwein (2).  
 West Union.
- FLOYD:**  
 Marble Rock.  
 Nora Springs.  
 Charles City.  
 Rudd.
- FRANKLIN:**  
 Sheffield.  
 Latimer.  
 Popejoy.
- FREMONT:**  
 Tabor.  
 Randolph.
- GREENE:**  
 Rippey.  
 Jefferson.  
 Grand Junction.
- GRUNDY:**  
 Reinbeck.  
 Dike.  
 Conrad.
- GUTHRIE:**  
 Guthrie Center.  
 Stuart.  
 Panora.  
 Casey.
- HAMILTON:**  
 Webster City (2).  
 Ellsworth.  
 Williams.
- HANCOCK:**  
 Corwith.
- HARDIN:**  
 Eldora.  
 Iowa Falls.  
 Union.  
 Steamboat Rock.  
 Alden.
- HARRISON:**  
 Dunlap.  
 Magnolia.
- HENRY:**  
 New London.  
 Salem.
- HUMBOLDT:**  
 Humboldt (2).  
 Renwick.  
 Hardy.
- IDA:**  
 Ida Grove.  
 Arthur.  
 Battle Creek.
- IOWA:**  
 Victor.  
 Williamsburg (2).  
 Conroy.
- JASPER:**  
 Colfax.  
 Andersonville.  
 Seevers.  
 Monroe.  
 Prairie City.  
 Newton.  
 Reasnor.  
 Baxter.  
 Kilduff.  
 Mingo.  
 Kellogg.  
 Lynville.
- JOHNSON:**  
 Oasis.
- JONES:**  
 Oxford Junction.  
 Scotch Grove.  
 Monticello.
- KEOKUK:**  
 What Cheer.  
 Keota.
- KOSSUTH:**  
 Burt (2).  
 Germania (2).  
 Algona (2).  
 Irvington.  
 Swea City.
- LEE:**  
 Denmark.  
 Keokuk.  
 Sawyer.  
 Ft. Madison.
- LINN:**  
 Cedar Rapids.  
 Central City (2).  
 Marion (3).  
 Rogers.  
 Springfield (2).  
 Viola.  
 Mt. Vernon.  
 Liscomb.  
 Coggon.
- LOUISA:**  
 Grandview.  
 Wapello.  
 Morning Sun.  
 Co'lumbus Junction.
- LUCAS:**  
 Chariton (3).  
 Lucas.  
 Russell (2).
- LYON:**  
 Inwood.
- MAHASKA:**  
 Oskaloosa.
- MARION:**  
 Knoxville.  
 Pella.
- MARSHALL:**  
 Le Grand (2).  
 Marshalltown (2).  
 Rhoades.  
 State Center.  
 Van Cleave.  
 Ferguson.
- MILLS:**  
 Glenwood.  
 Hillsdale.  
 Hastings.
- MITCHELL:**  
 St. Ansgar.  
 Osage.
- MONONA:**  
 Mapleton.  
 Castana.  
 Onawa.  
 Blencoe.  
 Turin.

<b>MONTGOMERY:</b> Villisca. Elliot. Red Oak.	<b>POWESHIEK:</b> Brooklyn. Grinnell. Malcolm. Montezuma (2).	<b>UNION:</b> Creston. Thayer.
<b>MUSCATINE:</b> Muscatine (2). West Liberty. Wilton Junction.	<b>RINGGOLD:</b> Mount Ayr (2). Tingley. Benton.	<b>VAN BUREN:</b> Cantril.
<b>O'BRIEN:</b> Hartley. Sanborn. Sutherland.	<b>SAC:</b> Early. Schaller. Nemaha. Lake View.	<b>WAPELLO:</b> Bidwell. Ottumwa (2). Wapello.
<b>PALO ALTO:</b> Emmetsburg (2). Graettinger.	<b>SHELBY:</b> Harlan. Shelby.	<b>WARREN:</b> Indianola. New Virginia. Norwalk (2). Summerset
<b>PLYMOUTH:</b> Merrill.	<b>SIOUX:</b> Hawarden. Hospers. Ireton.	<b>WEBSTER:</b> Callendar. Gowrie. Winnebago. Forest City (2). Buffalo Center. Lake Mills.
<b>POCAHONTAS:</b> Gilmore City. Laurens.	<b>STORY:</b> Slater (2). Huxley. Ames. Maxwell.	<b>WINNESHIEK:</b> Decorah.
<b>POLK:</b> Des Moines (3). Polk City. Valley Junction. Ankeny. Sheldahl.	<b>TAMA:</b> Gladbrook. Tama.	<b>WORTH:</b> Hantontown. Northwood.
<b>POTTAWATTAMIE:</b> Avoca. Macedonia.	<b>TAYLOR:</b> Bedford (2). Lenox.	<b>WRIGHT:</b> Eagle Grove. Clarion.

### SUMMER LIBRARY SCHOOL.

The importance and place of summer schools in educational work has become so generally recognized that they have become accepted features of many of our educational institutions. The Iowa Summer School for Library Training has passed the experimental stage and results have more than justified the expenditure of funds to maintain it. Students who have come for the six weeks' course have returned to their libraries with higher ideals, more definite understanding of the service which a library should render to the community and with a clearer understanding of the details of the library both as regards records and the relation of the librarian to the patrons of the library. The fourth session of the Iowa Summer Library School was held as heretofore at the State University at Iowa City, June 20 to July 24, 1904, and the fifth session June 19 to July 29, 1905. As was stated in our former report, this school is intended for the librarians of the smaller libraries, for assistants in the larger libraries and for those definitely appointed to library positions in the state who wish to prepare for their work. It is in no sense offered as a substitute for the regular course given in the regular library schools. Those who can possibly do so are advised to take the course in one of the following recognized library schools, giving courses of one and two years: State Library, Albany N. Y.; University of Illinois, Urbana, Ill.; Pratt Institute, Brooklyn, N. Y., Drexel Institute, Philadelphia and Western Reserve University, Cleveland, O.

The Director of the summer school is the Secretary of the Library Commission and a Vice-Director each year aids in supervising the work of the school. Instructors who are recognized as authorities in special subjects have given the daily lectures with practice work following, and visiting lecturers well known in the library world have brought to the school a larger view of the relations of the library to the world at large.

The instructors for the session of 1904 were Miss Esther Crawford, classification and cataloging; Miss Edith Tobitt, trade bibliography and binding; Miss Annie Carroll Moore, library work with children and Miss Tyler and Miss Brown of the Library Commission. Chief among the lecturers who are always welcome to the Summer School is Miss M. E. Ahern editor of *Public Libraries*, Chicago, who gave a most practical and entertaining talk on "Business Methods". An unaccountable omission of Miss Ahern's name in our former report leads to the further statement that Miss Ahern's lectures have been appreciated by the Director and students each year since the school has been in existence and it

was a source of great regret to the Director and the class of 1905 when Miss Ahern found it impossible to make her usual visit.

The session of 1905 showed many changes in the instructors; the cataloging instruction being given by Miss Della C. Sanford, head cataloger of the University of Iowa library; classification by Miss Miriam E. Carey, librarian of the Burlington, Iowa, public library; reference work by Mr. Matcom G. Wyer, librarian of the State University and children's work by Miss Carolyn F. Gleason, children's librarian of the Utica, N. Y. library. It was a cause of deep regret that Miss Crawford who had been identified with the school from the beginning and to whom the success of the school is largely due, found it impossible to accept a position as instructor for the session of 1905. When the history of library progress in Iowa comes to be written, no name will deserve greater recognition than that of Miss Esther Crawford, who in the early years before she left the state for a broader field was closely identified with the organization of the state Library Association and who in recent years, after having reached a position of prominence and service as a library instructor, came back to her native state for four succeeding summers as the head instructor in the Iowa Summer School for Library Training. It was also a source of deep regret that Miss Annie Carroll Moore, who has made the course in children's work so valuable in our school, found it impossible to give the instruction in 1905. Her three summers in the school have left an impress on the state of great value.

A new feature was added to the course of 1905 by the instruction in literary criticism given by Prof. C. F. Ansley of the State University, the course being given to aid librarians in their estimate of books. Miss Fanny Duren served as revisor of practice work for both the sessions of 1904 and 1905. The members of the Library Commission have always taken a keen personal interest in the school and each year give talks to the class. In addition to the lectures by the Commissioners the class of 1905 had the rare pleasure of two lectures from Miss Electra C. Doren, Vice-Dean of the Library School of Western Reserve University, who spoke on "Libraries and schools" and "Bad Books". Miss Bessie Sargeant Smith, librarian of the Dubuque, Iowa, public library and Mr. M. H. Douglass, librarian of the Iowa College library, at Grinnell both spoke on book selection and book buying.

The plan which the Director has adopted of securing a fraternity house for the home of the instructors and students while in Iowa City has proven to be the most satisfactory arrangement possible. In 1904 the Phi Delta Theta house was secured and in 1905 the Sigma Chi house, thus providing an enjoyable center of social life for the students as well as providing for their comfort.

The instruction in library work with children which has from the first been a distinctive feature of the Iowa Library School was given for three succeeding years by Miss Annie Carroll Moore whose work in this particular field has placed her in the foremost rank of children's librarians, being at the head of that work in the Pratt Insti-

tute library. It being impossible for Miss Moore to give the instruction in this subject in 1905, Miss Carolyn F. Gleason of Utica, N. Y. gave the two weeks course in a most acceptable manner.

There were 26 students enrolled for the session of 1904 and 18 for the session of 1905.

## STUDENTS OF THE SUMMER LIBRARY SCHOOL, 1904.

Name.	Place.	Library.
Bahner, Pearl	Forest City	Public
Bailey, Flora B.	Perry	Public
Bailey, Myrtle	Grinnell	Public
Bryant Ursula P.	Marion	
Cook, Lillian E.	Clinton	Public
Douglas, Mary M.	Cedar Rapids	Public
Freed, Kittie B.	Ames	Public
Gabrilson, Carolyn	Ames	Iowa State College
Goodrell Edna A.	Des Moines	Library Commission
Hamilton, Theodosia	Indianola	Simpson College
Harris, Grace W.	Ogden, Utah	Public
Hauer, Mrs. Luella	West Liberty	Public
Holman, Almeda M.	Mason City	Public
*Horton, Mrs. Elizabeth M.	Algona	Public
McBride, Jessie E.	Davenport	Public
McNish, Mabel O.	Fremont, Neb.	Public
Miltimore, Cora	Stillwater, Okla.	Agri. & Mech. Coll.
Parker, Marian	Mashalltown	Public
*Parkhurst, Mary L.	Marion	Public
Ray, Mary K.	Kearny, Neb.	Public
Ritchie, Jessie E.	Oskaloosa	Public
Roberts, Jennie E.	Iowa City	State University
Swan, M. Blanche	Mt. Pleasant	Ia. Wesleyan Univ.
Thompson, Elinor	Jacksonville, Ill.	Public
Tiffany, Bessie E.	Clinton, Mo.	School
*Townsend, Emma E.	Keokuk	Public

\*Second year course.

## STUDENTS OF THE SUMMER LIBRARY SCHOOL, 1903.

Name	Place	Library
Abel, Clara L.	Decatur, Ill.	Public
Adams, Mary N.	Atlantic	Public
Bankson, Georgetta	Waterloo	Public
Clapp, Alice B.	Burlington	Public
Duble, Mrs. Annie L.	Spencer	Public
Fuller, Mrs. Luella L.	Marseilles, Ill.	Public
Hamilton, Pearl	Marengo	Public
Jay, M. Berdena	Shenandoah	Public
Jones, Mrs. Jennie	Manchester	Public
Lilly, Elizabeth	Burlington	Public
Morton, Frances	Falls City, Neb.	Public
Murphy, Genevive	Clinton	Public
Myers, Grace E.	Denison	Public
Noll, Amy W.	Grinnell	Public
Smith, Mrs. Calista S.	St. Joseph, Mo.	Public
Tirrell, Mrs. Eliza J. W.	Manchester	Trustee
Whitney, Mrs. Elizabeth H.	Fairfield	Parsons College
Yates, Mrs. Anna S.	Tipton	Public

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 PERIODICAL EXCHANGE.

Much valuable literature is often first presented in the periodicals before being issued in book form, but the greater part of the contributions to periodicals do not appear in any other form. No more valuable material for reference work can be found than in the files of standard periodicals and hence the Library Commission encourages the libraries to complete their sets of a few of the leading magazines for reference purposes.

Poole's Index to periodical literature, Abridged edition, is an absolute necessity in every library in order that the material in the periodicals may be quickly accessible. Poole is the only key to the magazine articles which were printed in the periodicals from 1815 to the end of 1899. The supplement to this Index covers the four years from 1899 to the close of 1904. The two volumes, namely, Poole's Index Abridged, (costing \$12) and the Supplement thereto (costing \$5) should be purchased by any library that expects to build up a set of any of the standard periodicals such as Atlantic, Harpers, Century, Forum, North American Review, etc.

Current periodicals are indexed very thoroughly and promptly by means of the Readers' Guide to periodical literature, a monthly publication issued by the H. W. Wilson Co., Minneapolis, Minn., for an annual subscription of \$6 per year. This with the two volumes of Poole mentioned above gives the library a complete index to periodical literature both bound and current.

The plan of the periodical exchange is simply to serve as a medium for the exchange of periodicals, either single numbers or complete volumes. The Library Commission receives magazines from libraries or individuals and passes them on to such libraries as desire to complete their sets, the only cost being that of transportation.

During the biennial period, the Library Commission has sent out 2,092 complete volumes and 5,126 single numbers of magazines making a total of 17,678 magazines sent out in two years to libraries to aid in completing their sets. This means an immense strengthening of the resources of these libraries for reference purposes.

# LIBRARY STATISTICS FOR 1904.

## FREE PUBLIC LIBRARIES—SUPPORTED BY MUNICIPAL TAX.

Number.	Place.	Name of Library.	Librarian.	Year founded.	Volumes added, 1904.	Total number of volumes.	Number of volumes loaned, 1904.	Tax income.	Income from other sources.	Expenditures.			Paid.	Volunteer.	Hours open per week.
										Books.	Binding.	Periodicals.			
1	Albana.	Free Public	Mrs. E. M. Horton.	1899	231	4,600	14,650	\$ 851	\$ 63	\$ 115	\$ 16	73	500	2	30
2	Ames.	Free Public	Lorena N. Webber.	1904	1,435	1,601	2,751	832	677	381	72	390	590	2	30
3	Anamosa.	Free Public	Corenelia McCarn	1903	975	1,096	12,066	635	485	707	60	360	360	2	26
4	Atlantic.	Free Public	Pearl Evans	1903	974	1,096	10,523	1,250		15	30	360	360	2	38
5	Boone.	Free Public	Bessie Moffatt	1895	974	9,965	15,112	2,742		564	179	81	1,095	3	66
6	Burlington.	Free Public	Miriam E. Carey	1895	1,029	25,775	70,036	5,343		660	210	161	1,082	3	75
7	Carroll.	Free Public	Mrs. Martha H. Bangs	1900	2,000	2,136	6,742	730	40	125	43	65		2	8
8	Cedar Falls.	Free Public	Enrico H. Overman	1878	551	8,404	18,263	1,500		200	63	87	509	3	42
9	Cedar Rapids.	Free Public	Harriet A. Wood	1896	1,779	12,418	67,618	7,473	159	1,075	785	240	2,735	3	42
10	Centerville.	Free Public	Mrs. Linna Ulrich.	1902	662	5,462	21,878	1,165	300	348	54	18	545	3	47
11	Chariton.	Free Public	Mrs. Howard Bliss	1895	62	1,660	4,022	1,290	90	44	18	545	545	1	18
12	Charles City.	Free Public	Margaret W. Brown.	1898	202	2,036	13,896	1,000		182	52	55	240	1	28
13	Cherokee.	Free Public	Belle Caldwell	1878	810	2,910	20,713	1,400	376	47	11	273	1	1	31
14	Clinton.	Free Public	Mrs. J. H. Burlingame	1898	547	4,386	10,450	1,090	34	457	82	59		13	42
15	Colfax.	Free Public	Belie Sweet	1904	121	8,851	12,433	4,500		3,000	125	1	275	4	72
16	Council Bluffs.	Free Public	Florentia Ogan	1901	121	1,514	7,129	413	31	131	35	23	200	1	19
17	Davenport.	Free Public	Mrs. Lottie V. Bryant.	1899	596	3,200	9,954	624	58	301	74	21	156	4	50
18	Davenport.	Free Public	Mrs. Mary E. Dailey	1892	451	24,747	66,035	7,098	258	903	358	25	1,942	7	58
19	Des Moines.	Free Public	Martha W. Freeman	1902	2,943	16,287	116,388	9,028	3,876	2,173	456	134	3,600	7	33
20	Des Moines.	Free Public	Grace E. Myers	1902	1,067	2,339	9,700	1,150	1,150	1,398	60	360	720	1	33
21	Dubuque.	Free Public	Ellie M. McLoney	1892	1,230	32,818	167,520	15,747	784	1,584	816	452	5,728	11	79
22	Dubuque.	Free Public	Bessie Sargeant Smith	1902	1,237	18,688	101,087	7,300	1,340	649	227	2,715	9	75	14
23	Dubuque.	Free Public	Mrs. Belle Y. Miller.	1902	176	18,949	7,478	744	113	117	24	21	300	1	14
24	Eldora.	Free Public	Mrs. Georgia Boyd	1896	375	4,237	12,076	1,000	425	425	90	360	360	1	33
25	Eldora.	Free Public	Clara E. Estabrook	1878	375	2,941	14,702	2,091	199	218	111	51	300	1	33
26	Estherville.	Free Public	Mrs. H. H. Davidson	1896	635	2,941	14,702	2,091	199	218	111	51	300	1	33
27	Fairfield.	Free Public	H. M. Dyrart	1899	516	19,619	8,832	631	72	123	47	20	162	1	38
28	Fort Dodge.	Free Public	Pearl Bahner	1899	189	1,754	9,352	4,300	72	1,002	56	81	1,080	2	39
29	Fort Dodge.	Free Public	Mrs. Jane M. Carpenter	1874	855	11,859	27,708	4,300	72	1,002	56	81	1,080	2	39
30	Fort Madison.	Cattermole Memorial	Mrs. Jane M. Carpenter	1893	862	7,815	34,097	1,766	255	530	260	105	824	3	44
31	Grinnell.	Free Public	Jennie Ingalls	1894	862	7,815	34,097	1,766	255	530	260	105	824	3	44
32	Hampton.	Free Public	Mary E. Wheelock	1894	862	7,815	34,097	1,766	255	530	260	105	824	3	44
33	Hawarden.	Free Public	Carrie O. Barker.	1896	165	2,441	5,992	1,400	456	34	48	15	190	1	10
34	Hawarden.	Free Public	Jennie P. Smith	1902	165	1,205	4,331	456	34	48	15	190	1	10	10

34	Hawkeye	Free Public	1898	51	1,261	11,707	50	54	56	25	1	6
35	Independence.	Free Public	1874	264	6,220	11,707	1,450	.....	.....	.....	1	.....
36	Indianola	Free Public	1899	166	4,734	14,024	1,430	.....	.....	112	2	36
37	Iowa City	Free Public	1897	1,048	7,745	33,964	1,430	.....	.....	437	4	73
38	Iowa Falls	Free Public	1899	1,331	2,929	12,723	1,129	.....	.....	360	1	43
39	Jefferson	Free Public	1901	443	3,054	12,345	1,907	.....	.....	157	1	15
40	Keduk	Free Public	1894	556	14,644	50,158	2,250	1,012	.....	60	2	66
41	LeMars	Free Public	1894	342	5,003	14,171	1,250	67	.....	497	3	.....
42	Leon	Free Public	1885	1,592	8,580	18,580	1,250	.....	.....	38	3	53
43	Manchester	Free Public	1901	284	3,091	9,174	1,000	141	.....	48	1	23
44	Maquoketa	Free Public	1881	886	5,285	26,105	1,208	376	.....	36	2	36
45	Marengo	Free Public	1904	107	1,090	7,712	.....	371	.....	20	1	.....
46	Marion	Free Public	1902	906	9,733	40,620	2,700	.....	.....	200	1	30
47	Marshalltown.	Free Public	1892	2,244	5,850	23,940	2,338	98	.....	1,646	3	54
48	Mason City	Free Public	1888	59	2,250	7,666	240	11	.....	113	1	54
49	Missouri Valley	Free Public	1891	2,416	2,416	10,747	721	554	.....	15	2	39
50	Monticello	Free Public	1894	285	6,708	15,498	1,379	78	.....	100	1	39
51	Mount Pleasant	Free Public	1872	1,702	8,031	50,744	3,916	742	.....	114	1	76
52	Muscatine	Free Public	1901	446	1,508	7,665	491	42	.....	1,276	4	.....
53	Nashua	Free Public	1876	80	4,862	7,784	824	147	.....	157	1	14
54	Nevada	Free Public	1876	594	4,885	23,408	1,000	315	.....	20	1	34
55	N-wton	Free Public	1902	1,269	3,495	12,829	1,027	66	.....	30	1	46
56	Odebolt	Free Public	1903	41	1,861	7,587	847	.....	.....	160	1	34
57	Osage	Sage	1898	1,269	3,495	12,829	1,027	66	.....	30	1	46
58	Osaka	Free Public	1875	1,890	4,438	17,962	2,249	900	.....	160	1	34
59	Oskaloosa	Free Public	1869	1,050	4,389	23,460	2,249	900	.....	160	1	34
60	Ottumwa	Free Public	1900	3,254	13,136	62,461	4,574	402	.....	1,940	1	54
61	Perry	Free Public	1904	724	1,145	3,964	1,000	.....	.....	124	2	.....
62	Ro k Rapids	Free Public	1882	119	9,150	4,200	321	28	.....	45	1	.....
63	Sanborn	Free Public	1901	149	575	4,460	.....	.....	.....	17	1	.....
64	Sandborn	Free Public	1894	149	575	4,460	.....	.....	.....	17	1	.....
65	Shenandoah	Free Public	1903	1,768	19,624	58,864	4,306	256	.....	180	1	36
66	Sioux City	Free Public	1877	185	3,500	.....	.....	.....	.....	413	4	59
67	Spencer	Free Public	1891	243	1,896	7,366	460	.....	.....	355	2	.....
68	Storm Lake	Free Public	1904	243	1,896	7,366	460	.....	.....	355	2	.....
69	Stuart	Free Public	1901	243	1,896	7,366	460	.....	.....	355	2	.....
70	Tama	Free Public	1904	243	1,896	7,366	460	.....	.....	355	2	.....
71	Tipton	Free Public	1901	243	1,896	7,366	460	.....	.....	355	2	.....
72	Vinton	Free Public	1901	243	1,896	7,366	460	.....	.....	355	2	.....
73	Washington	Free Public	1901	243	1,896	7,366	460	.....	.....	355	2	.....
74	Waterloo, Div. A	Free Public	1877	812	4,878	25,813	2,336	118	.....	98	2	43
75	Waterloo, Div. B	Free Public	1877	812	4,878	25,813	2,336	118	.....	98	2	43
76	Waverly	Free Public	1897	336	3,498	16,218	1,988	45	.....	135	1	43
77	Webster	Free Public	1898	364	3,680	20,560	2,448	760	.....	135	1	43
78	Webster City	Free Public	1898	364	3,680	20,560	2,448	760	.....	135	1	43
79	West Branch	Free Public	1901	212	2,097	12,034	751	538	.....	127	1	40
80	West Liberty	Free Public	1901	212	2,097	12,034	751	538	.....	127	1	40
81	Winterset	Free Public	1891	211	3,193	12,777	900	.....	.....	51	1	30

†Endowed.

\*Statistics for part of year only.



## COLLEGE AND ACADEMY LIBRARIES.

Place.	Name of Library.	Librarian.	Volumes added, 1904.	Total number of volumes.
Cedar Rapids...	Coe College.....	Mary I. Amidon.....	835	5 389
Charles City ..	Charles City College .....	Leta A. Kuch .....	50	.....
Clinton .....	Wartburg College . .....	H. Kuhlmann .....	126	3 126
Decorah.....	Luther College .....	O. A. Naeseth .....	579	13,013
Denison.....	Normal College.....	.....	130	1 000
Des Moines.....	Des Moines College.....	Caroline E. Frees .....	90	4 961
Des Moines.....	Drake University .....	Mary A. Carpenter .....	600	7 900
Des Moines.....	Grand View College.....	P. P. Hornsyld.....	.....	3 500
Dubuque .....	Wartburg Seminary.....	Prof. M. Rau .....	.....	8 000
Epworth .....	Epworth Seminary .....	Helen I. Hanna .....	23	3 525
Fairfield.....	Parsons College .....	Mrs. Elizabeth Whitney .....	.....	1,000
Fayette .....	Upper Iowa University .....	.....	.....	.....
Grinnell.....	Iowa College .....	M. H. Douglass .....	1 782	32,105
Hopkinton .....	Lenox College .....	Ella M. Kennedy .....	318	3,488
Humboldt .....	Humboldt College .....	.....	.....	.....
Indianola .....	Simpson College .....	Theodosia Hamilton .....	428	4,263
Iowa Falls .....	Ellsworth College .....	R. H. Baskerville .....	100	2 500
Lamoni .....	Graceland College .....	J. P. Anderson .....	950	2,300
Le Grand .....	Palmer College .....	O. B. Fortner .....	25	1,025
Mt. Pleasant ...	Iowa Wesleyan University .....	M. Blanche Swan .....	294	9,249
Mt. Vernon.....	Cornell College .....	May L. Fairbanks.....	851	24,952
Orange City.....	Rapelye Academy .....	E. J. Strick .....	50	3,250
Osage .....	Cedar Valley Seminary.....	W. A. Hansen .....	30	3,125
Oskaloosa.....	Penn College .....	Rosa E. Lewis.....	200	6,000
Pella .....	Central University .....	W. A. Young .....	250	6,550
Salem .....	Whittier College .....	Carrie A. Powell.....	.....	810
Shenandoah.....	Western Normal College.....	J. M. Hussey .....	200	2,300
Sioux City.....	Morning Side College .....	Jessie Swem .....	600	5,000
Storm Lake .....	Beuna Vista College.....	J. T. Patterson .....	99	4 571
Tabor .....	Tabor College .....	Harriet K. Avery .....	1 581	12 996
Toledo .....	Western College .....	E. O. Fiske .....	25	3,200

## SCHOOL LIBRARIES.

Statistics of school libraries, arranged by counties, may be found in the Biennial report of the Superintendent of Public Instruction.

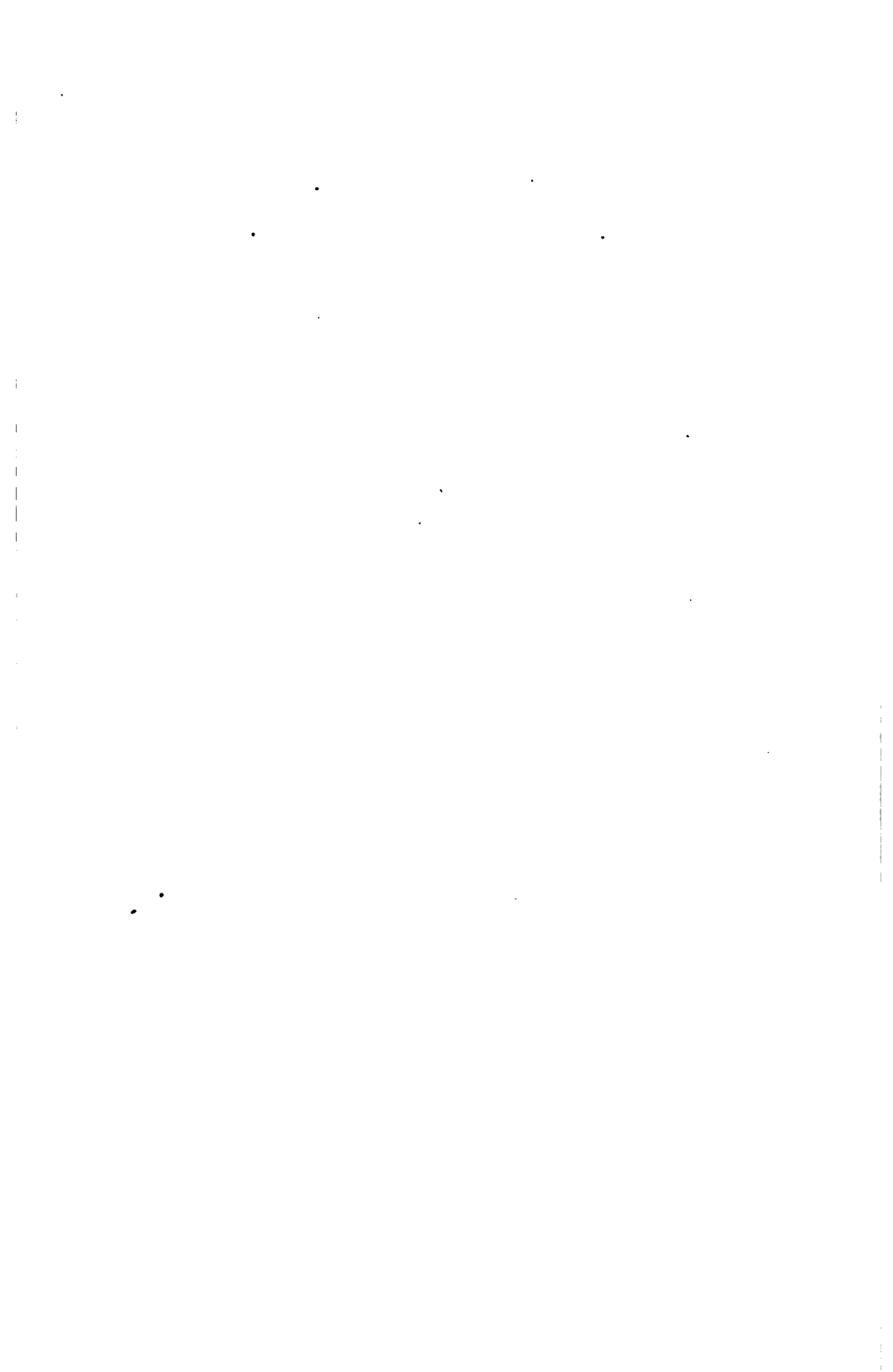
## LIBRARIES SUPPORTED BY THE STATE.

Place.	Name of Library.	Librarian.	Volumes added, 1904	Total number of volumes.
Ames .....	Iowa State College .....	Vina E. Clark .....	1,000	18,000
Anamosa .....	State Penitentiary .....	Chaplain .....	821	7,576
Cedar Falls .....	State Normal School .....	Anna M. Baker .....	1,654	17,291
Clarinda .....	Hospital for Insane .....	Elizabeth Giblin .....	84	1,529
Des Moines .....	State Library .....	Johnson Brigham .....	4,784	65,469
Des Moines .....	Historical Department .....	Charles Aldrich .....	841	12,595
Des Moines .....	Traveling Library .....	Iowa Library Com. ....	1,165	12,718
Des Moines .....	Horticultural Society .....	Wesley Greene .....	50	12,012
Des Moines .....	State Board of Health .....	Dr J. F. Kennedy .....	2,000	
Des Moines .....	Dept. Public Inst .....	J. F. Riggs .....	4,050	
Eldora .....	Industrial School .....			
Fort Madison .....	State Penitentiary .....	A. H. Jessup .....	489	6,625
Glenwood .....	Ins't for Feeble-Minded .....	George Mogridge .....		1,194
Independence .....	Hospital for Insane .....	Dr. Crumbacker .....		881
Iowa City .....	State Historical Society .....	Margaret Budington .....	7,780	37,789
Iowa City .....	State University .....	Malcolm G. Wyer .....	4,240	70,160
Iowa City .....	Univ. Law Library .....	M. L. Ferson .....	625	11,842
Marshalltown .....	Iowa Soldiers' Home .....	George Terry .....	6	1,740
Vinton .....	College for Blind .....	T. F. McCune .....	30	2,438

## MISCELLANEOUS.

Atlantic .....	J. K. Powers (I. O. O. F.) .....	Frank Kurka .....	158	1,366
Cedar Rapids .....	Bohemian Reading Soc. ....	N. R. Parvin .....	550	21,500
Cedar Rapids .....	Iowa Masonic .....	C. E. Harrison .....	400	15,300
Davenport .....	Academy of Science .....	J. G. A. Wunder .....	200	3,000
Davenport .....	Turner Bibliothek .....	J. W. Ballinger .....		
Davenport .....	James Grant Law .....	A. L. Brown .....	157	1,625
Fort Dodge .....	Webster Co., Teachers .....	Amanda Elliott .....	100	1,162
Knoxville .....	I. O. O. F .....	F. M. Sprague .....	200	2,100
Lemont .....	Reorgan. Church, L. D. S .....	Mrs. L. G. Cameron .....	78	978
Sixoux City .....	Teachers' .....	Mrs. Carrie Morrison .....	30	1,680
Trenton .....	Henry Co. Institute .....			













EIGHTEENTH ANNUAL REPORT

OF THE

STATE DAIRY COMMISSIONER

TO THE

GOVERNOR OF THE STATE OF IOWA

FOR THE YEAR 1904.

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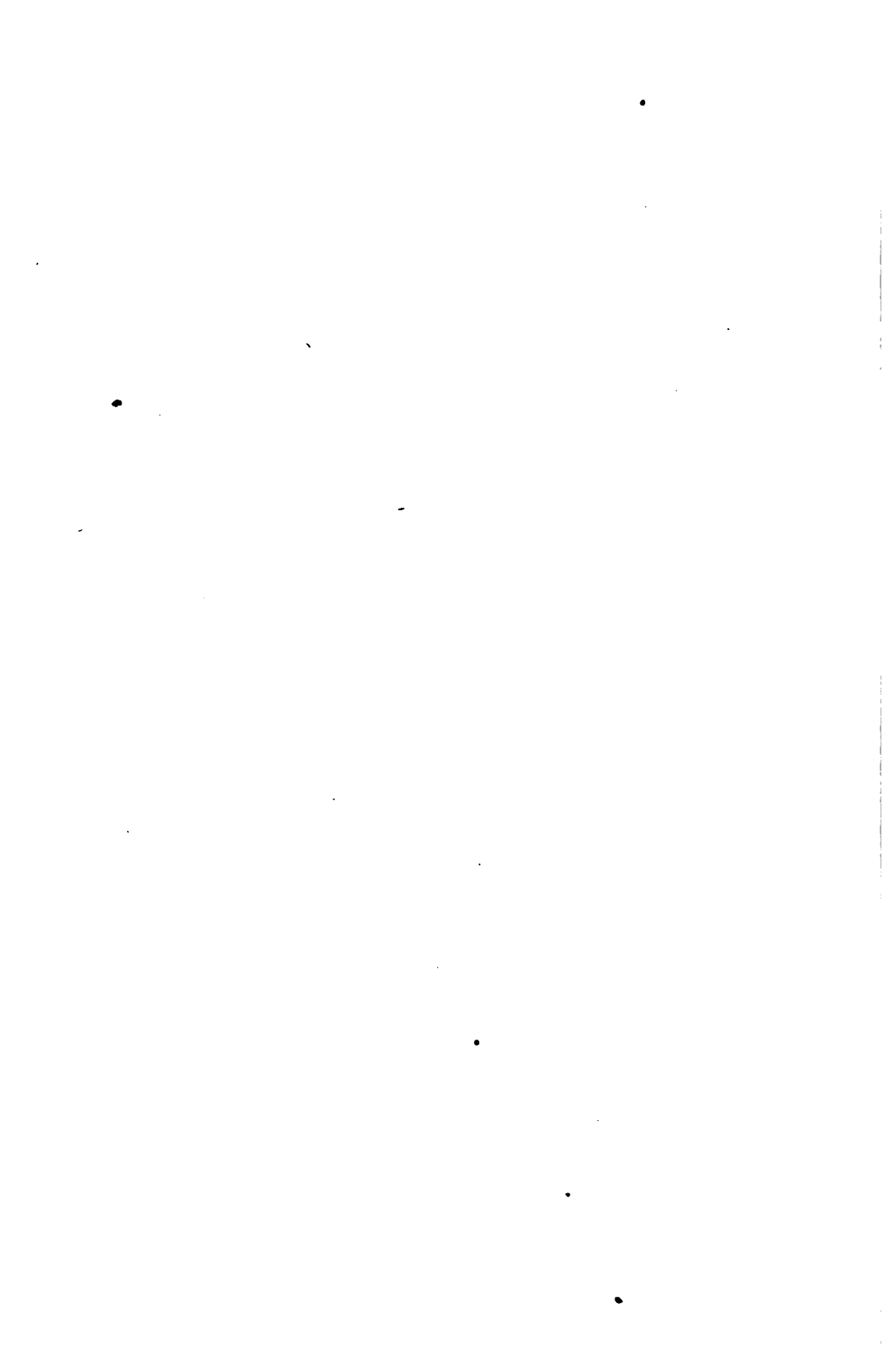
H. R. WRIGHT,  
STATE DAIRY COMMISSIONER.

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

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DEJ MO.NES:  
BERNARD MURPHY, STATE PRINTER.  
1904.



## LETTER OF TRANSMITTAL.

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*To His Excellency, ALBERT B. CUMMINS, Governor of Iowa:*

SIR,—In compliance with the law, I have the honor to submit herewith the Eighteenth Annual Report of the Dairy Commissioner.

Very Respectfully,

H. R. WRIGHT,

Dairy Commissioner.

DES MOINES, November 1, 1904.



**EXPENSE OF OFFICE OF DAIRY COMMISSIONER FOR THE YEAR  
ENDING NOVEMBER 1, 1904.**

Dairy commissioner's salary .....	\$ 1,500.00	
Dairy commissioner's expense .....	584.70	
Total .....		\$ 2,084.70
Deputy dairy commissioner's salary .....	\$ 1,066.66	
Deputy dairy commissioner's expense .....	154.57	
Total .....		\$ 1,221.23
Assistant dairy commissioner's salary (P. H. Kleffer) .....	\$ 1,066.66	
Assistant dairy commissioner's expense .....	989.70	
Total .....		\$ 2,056.36
Assistant dairy commissioner's salary (W. S. Smarzo) .....	\$ 400.00	
Assistant dairy commissioner's expense .....	378.12	
Total .....		\$ 778.12

**EXPENSE OF MILK INSPECTION IN FOURTEEN CITIES.**

Milk agents' fees .....	\$ 1,776.00	
Milk agents' expense .....	226.25	
Milk agents' special work .....	24.50	
Total .....		\$ 2,026.75

**OFFICE EXPENSE.**

Legal expense .....	\$ 800.00	
Analyses .....	65.75	
Filing case and card index .....	59.50	
Miscellaneous .....	17.88	
Total .....		\$ 442.68
Express freight and cartage .....		104.87
Telegraph and Telephone .....		20.32
Total .....		\$ 8,684.48
* Less salaries .....		4,063.32
Total expenditures from appropriations .....		\$ 4,621.16
Average monthly expense .....		\$ 387.59

\* Salaries are not paid from the specific appropriation. The amount appropriated for the biennial period extending from April 1, 1904, to July 1, 1906, 27 months, was \$12,325, of which has been expended in 7 months, \$2,906.47.



## DAIRY COMMISSIONER'S REPORT.

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The statistics of creameries and creamery butter, for renovated butter and cheese, in this report are for the year ending July 1, 1904. Statistics in regard to railway shipments of butter are for the year ending September 30, 1904. The creamery list is corrected down to November 1, 1904.

The uncertain and changing conditions of many of Iowa's creameries have made it more than usually difficult to secure anything like complete reports. It has never been possible to get an absolutely complete report from the creameries of the State, but the data given in the last seven reports of this office has been compiled in similar manner each year, so that comparisons may be made between figures for the several years with the assurance that the statistics are relatively correct. It is assumed that the averages derived from the reports of creameries that do report are the averages for all the creameries of the State.

The same accuracy can not be claimed for the statistics of the various counties. That is to say, the butter reported as manufactured in some of the counties is not produced in those counties, some of it, indeed, not in the State. The centralizing plants, and to some extent the makers of renovated butter, increase the totals for the counties in which the factory is located, when in fact, most of their product arises in other counties. Very large quantities of packing stock are shipped into the State to the renovators. It is true, also, that considerable cream is shipped into the State from Missouri, Wisconsin and Nebraska. It is also true that considerable cream is shipped out of the State to St. Joseph, Omaha, Sioux Falls, St. Paul and Minneapolis. All these things affect the statistics of creamery butter produced, or the statistics of railway butter shipments, or both.

The Thirtieth General Assembly amended the law in regard to the appointment and salaries of the assistant and deputy

dairy commissioners, increasing the salary to \$1,200 per year and increasing the number of assistant dairy commissioners from one to two. Under this law, Mr. W. S. Smarzo, of Masonville, was appointed on July 4th as Assistant Dairy Commissioner. Under the terms of the statute authorizing the employment of assistant dairy commissioners, they must be expert buttermakers. The work of Mr. Smarzo and Mr. Kieffer has been of two kinds: First, inspection of the creameries, to see that they are complying with the law in regard to cleanliness and general sanitary conditions. Second, assisting and instructing buttermakers so that their product may be of a higher grade, and so sell for a higher price. The creamery business is a co-operative business, whether called so or not, and any increase in price which the management may secure in the sale of their butter will directly benefit the farmers whose milk or cream was used in the production of that butter. Every year butter is more and more sold on its merits in the market, and if this department can do anything to increase the value of the butter by bettering its quality, the money which the State spends for the support of this department will be returned to the dairymen of the State many fold. The effect of the work of the assistant dairy commissioners among the creameries has been plainly shown in the high scores attained by a number of Iowa buttermakers at the various contests that have been held in the last year, especially when these scores are compared with the scores of the same buttermakers at previous times.

The law gives this department plenty of authority for compelling the creamery management to keep the plant in a clean and sanitary condition, but we can only advise and urge the use of better and more profitable methods. It is gratifying to be able to state that in nearly every case the buttermaker and the creamery management are very willing and anxious to adopt the suggestions of the experts of this office.

#### FARMERS' INSTITUTES.

Aside from the work of the agricultural colleges, the Farmers' Institute is still the chief means of bringing to the majority of the farmers that knowledge of modern and improved methods which is essential to their highest success. With this thought in mind the dairy commissioner has urged the farmers' institutes of the State to make the dairy topic one of the principal topics to be discussed at their meetings, a suggestion which

has been quite generally adopted, not only in those sections of the State where the dairy business is now of considerable importance, but also in other parts of the State in which but little butter is made. In addition to this work at farmers' institutes, the farmers of various localities and the patrons of a good many creameries have been induced to hold meetings for the discussion of dairy topics particularly. This office has furnished speakers for sixty-five meetings of farmers' institutes and similar gatherings in the last year.

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### CITY MILK INSPECTION.

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The city milk inspection in fourteen cities costs the State of Iowa about two thousand dollars a year, as shown by the financial statement preceding. Almost all of the work consists of collecting samples from the city milk dealers as they make their rounds for the sale of milk and cream, and testing the same by the Babcock test in order to see that the milk sold is complying with the legal standard. More than one thousand samples of milk are tested each month by the Babcock test for butterfat, which readily shows whether the milk has been skimmed or watered. This same test will show with fair accuracy whether the milk has been adulterated by the addition of formaldehyde. Very little milk which comes under the notice of this department is really adulterated in any of these manners. Contrary to general belief, milk is not frequently adulterated. More objection can be raised to the milk sold in the State of Iowa from the standpoint of cleanliness than from any other point of view, but each year sees a gradual improvement in the method of handling the utensils used and the wagons and other paraphernalia or the business. There is also a growing tendency in most of the cities toward combination of the retail milk dealers for the purpose of establishing prices, so that now in most of the towns affected by this milk inspection, the price of milk is about six and one-quarter cents a quart for the winter months.

While it is true that a very small proportion of the milk offered for sale is adulterated, it is the policy of this office at present to enter complaint against any probable violator of the law, if the evidence appears sufficient so that a conviction is probable. Acting on this principle, prosecutions have been

undertaken in the cities of Ottumwa, Council Bluffs and Sioux City, the offense charged being the use of formaldehyde as preservative in the milk. In some of these cases, the defendant has plead guilty and paid his fine, and in others the cases have not yet come to trial. The detection in the use of preservative in milk is so easy that it is astonishing that any milkman will use a preservative. His self-interest, as well as his sense of honesty, ought to prevent his taking any chances.

The growth of the city milk inspection in this State is indicated by the following table showing the number of permits for milk dealers issued in they ears from 1894 to 1904. The years end in every case on the 4th of July:

1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
359	491	566	620	574	676	714	784	821	783	780

The milk inspection carried on under the direction of this department affects about one-seventh of the population of the State, as will be seen by the following table:

Cities.	Population.	Inspectors.
Burlington.....	23,201	Dr. W. C. Hummell.
Cedar Rapids.....	25,656	Dr. J. W. Griffith.
Clinton.....	22,698	F. E. Bills.
Council Bluffs.....	25,802	H. A. Lennox.
Davenport.....	35,254	H. J. High.
Des Moines.....	62,139	G. L. Burdick.
Dubuque.....	36,297	Dr. Charles Palen.
Fort Dodge.....	12,162	D. C. Benjamin.
Keokuk.....	14,641	A. A. Bland.
Marshalltown.....	11,544	Dr. E. M. Singleton.
Muscatine.....	14,073	Dr. John Tillie.
Ottumwa.....	18,197	E. B. Hill.
Sioux City.....	33,111	J. E. Huffman.
Waterloo.....	12,580	Theo. Peek.
Total.....	347,355	.

## CONDITION OF THE CREAMERY AND DAIRY INDUSTRY.

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The creamery and dairy industry in Iowa has a history during the last five or six years that amounts almost to a revolution. Not only has the number of creameries in the State in these years first increased and then decreased very materially, but these changes have not been uniform throughout the State by any means. There has been a general falling off in the practice of dairying in the State but this falling off has been very much more in the western and central parts of the State than in the so-called dairy district in the northeast quarter of the State. It is evident that the causes of the decreases have not affected all sections of the State alike. Six years ago there were still a few gathered cream creameries in the State, but no cream was sent more than a few miles from the farm on which it was produced and none was shipped by rail. At present none of the former gathered cream creameries have changed their manner of business; more than half the creameries of the State receive more or less cream; sixty-one of them, and among the largest ones, ship cream by rail; there are sixty-five creameries that are exclusive hand separator creameries, more than twenty-five thousand hand separator patrons in the State and 40 per cent of the butter made in the creameries is made otherwise than from whole milk.

Iowa's creameries have always made more butter to the creamery than those of other States and the average make has been heretofore about one hundred thousand pounds per annum. On account of the central plants making from a few hundred thousand pounds to a few million pounds this average this year is more than one hundred twenty thousand, and this notwithstanding the fact that there is more than the usual proportion of creameries with a make less than the average. The tendency toward larger creameries is unmistakable even aside from the central plants. The relatively high expense in the smaller

creamery makes it certain that they can not long continue to compete with the larger and more economically operated creameries, whether of the local or central variety. This tendency is further accentuated by the impossibility of employing the most expert butter makers in the small creameries because they can not pay wages sufficiently high to get them. Hence their butter is likely to be of poorer quality and bring a less price than that of the well-managed larger creamery.

While the creamery business has not had the smoothest pathway for the last few years from a business standpoint, it is also true that the creameries have suffered from a general decrease in the practice of dairying in this State. This decrease in dairying in the State is both an effect and a cause. It is the effect produced by high prices of other products of the farm. It is the cause of increased interest on the part of a considerable number of farmers in the scientific and modern methods of dairying. Indeed, there is a great increase in the interest shown by Iowa farmers in scientific and modern methods as applied to all lines of agriculture. Because the State of Iowa is adapted by climate and soil to the production of dairy products it is certain that the State will always be one of the great dairy states, but the increase of the immediate future will not be increase of butter production or of creamery building, but will be increases of profits that will accrue to the individual who continues in the business and adopts the best methods. The efforts of those who would advance and increase the importance of the dairy interests of this State must be in the line suggested. There was a time when the farmer milked his cows because he had to make money enough to live, but that situation was only temporary; now he will milk only when he can be persuaded that there is sufficient money in the business to make it worth while to practice it, and to submit himself to the confinement and regularity that goes with the dairy business. He will model his dairy and his dairy practice after the manner of those who are getting \$40 or \$50 or \$75 per year from their cows rather than the manner of the "average" dairyman who is lucky if he gets \$25 from each cow. There are a few men in almost every county of the State, and many of them in the older dairy counties that are already using a silo, feeding a balanced ration, selecting their poorest cows for sale, and gaining increased profits by so doing. The future will multiply this kind of dairymen for the reason that they will be the ones whose profits are such as to keep them in the business.

Something similar is true in regard to the creameries. The day when a "buttermaker" can be hired for a little more than farm laborers' wages is past, because the creameries are willing to pay good wages for satisfactory service, and because they can not afford to employ any but the best when the success of a business of \$20,000 to \$100,000 depends so largely upon the skill of the buttermaker. The changing conditions in dairy and creamery practice will certainly result in bringing both businesses to a stable and satisfactory and successful and profitable basis.

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### POSITIONS FOR BUTTERMAKERS.

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During the past year there has been an increasing number of requests to this department from buttermakers seeking employment, as well as from creameries desiring to employ buttermakers. In a great many cases the department has not been able to serve either of the parties because of lack of knowledge of the needs of the various creameries. It has been determined, therefore, that, following the appearance of this report, the dairy commissioner will be glad to have buttermakers desiring employment list their names and qualifications at this office, and to have creameries who desire to be put in communication with such buttermakers also list their names and locations. The creameries should state the amount of product they are handling, the wages they will pay, and the time it is desired that a new man shall begin work. The average wages of buttermakers in this State is about sixty dollars a month, and an average man can not be secured for less than this amount. The buttermaker desiring employment should state his experience and former places of employment, and the wages that he will demand. This office will not recommend any buttermaker except on the personal knowledge of the commissioner or his assistants, but will stand ready to put the creamery and the buttermaker in communication with one another without expense to either party.

## OLEOMARGARINE.

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The dairy interests of Iowa are vitally interested in the successful enforcement of all proper laws regulating the sale of oleomargarine. This State produces ten per cent of all the butter made in the United States and any injury that may be done to the dairy business by the fraudulent sale of oleomargarine as butter will be felt largely by the butter producers of this State. The legislature of this State, taking this view of the matter, early put upon the statute books of Iowa a practical and efficient law in regard to the sale of oleomargarine, known in our statute as "imitation butter" or "substitute for butter" of which the following is the vital part.

Section 2516 of the Code, after defining imitation butter and cheese provides:

No one shall manufacture, have in his possession, or offer to sell, solicit or take orders for delivery, ship, consign or forward by any common carrier, public or private, and no common carrier shall knowingly receive or transport any imitation butter or cheese, except in the manner and subject to the regulations in this chapter provided.

A close reading of this sentence from the law shows it to be a complete prohibition of the sale of oleomargarine in this State, with the saving clause added, "except in the manner and subject to the regulations in this chapter provided."

Section 2517 reads in part:

A substitute for butter and cheese, *not having a yellow color*, nor colored in imitation of butter . . . . may be manufactured . . . . sold . . . ., etc.

The dairy commissioner believed that the clause, "not having a yellow color" was intended to prevent the sale of oleomargarine having any shade of yellow even though it could not be proved that it had been "colored in imitation of butter" by the addition of some material designed especially to give the substance a yellow color such as most butter has.

In January, 1903, there were in this State about two hundred licensed dealers in so-called uncolored oleomargarine. In the five or six years immediately before that time there had never been more than one or two licensed dealers at a time, but the new national law taxing colored oleomargarine ten cents a pound had gone into effect and had reduced the retailer's license from \$48 to \$6 a year and two hundred dealers were experimenting with uncolored oleomargarine and hoping to sell it in competition with butter because every pound of it had a slight shade of yellow. It was advertised in circular letters in the following language: "Our uncolored oleomargarine has the highest shade of yellow of any brand now on the market."

In January, 1903, the grand jury of Polk County, at the instance of the dairy commissioner, indicted the Armour Packing Co. for the sale of oleomargarine "having a yellow color" and this indictment resulted in the conviction of the Armour Packing Co. An appeal was taken to the Supreme Court of the State and the interpretation of the law outlined above and the conviction under it were sustained. The attorneys for the Armour Packing Co. filed a petition for a rehearing, which petition has been overruled.

The form of the Iowa statute is different from that of any other State and this decision becomes of greater importance for the reason that the decisions of other states have never touched the point made in this case and decision, namely, that a State legislature may prohibit the sale of oleomargarine that has a yellow color, no matter whether that yellow color arises from the addition of some coloring matter or whether it arises from the natural color of the ingredients used in its manufacture. The decision is given in full below:

APPEAL FROM DISTRICT COURT, POLK COUNTY; W. H. MCHENRY, *Judge*.

Indictment for the sale of a product in imitation of butter. Judgment of conviction, and the defendant appeals—*Affirmed*.

*Carr, Hewitt, Parker & Wright*, for appellant.

*Charles W. Mullan*, Attorney-General; *Lawrence DeGraff*, Assistant Attorney-General; *Jesse A. Miller*, and *J. J. Hal-loran*, for the State.

DEEMER, C. J.—The indictment charges a sale by the defendant of a substance or compound made in the semblance of,

designed for and intended to be used in the place of, and as a substitute for, butter, which said substance or compound was not produced from pure milk and cream, although bearing the yellow color in resemblance of true dairy products. The evidence showed a sale by the defendant of a tub or firkin of oleo-margarine. The buyer knew what he was purchasing, and the tub was sealed, labeled and marked in every particular as required by statute with reference to the sales of substitutes for butter; but the product itself bore a yellow color in imitation of butter. The theory on which the case was tried is fully shown in one of the instructions given by the trial court, which we here reproduce: "You will observe that the charge in the indictment is not for coloring imitation butter, nor for selling it without it being marked as required, but it is for unlawfully selling it, it having a yellow color. The statute, as applied to this charge, prohibits the selling of imitation butter, or substitute for butter, having a yellow color. The words 'yellow color' here used, mean the natural yellow color of butter made from milk or cream from cows, without any coloring matter having been added thereto. If you find that the defendant is a corporation, and that it sold the firkin and contents introduced in evidence as 'Exhibit A' to H. R. Wright, and if you find the same is imitation butter, or substitute for butter, you will then determine whether or not it is of yellow color, as herein defined to you; and this you will determine from your own knowledge, experience or observation, whether the contents of the firkin of imitation butter or substitute for butter in evidence is of a yellow color—that is, of a natural color of butter made from milk or cream from cows. And if you so find, your verdict will be 'Guilty'; otherwise it will be 'Not guilty'."

The statutes material to our inquiry read as follows:

SEC. 2516. Every article, substitute or compound, save that produced from pure milk or cream from cows, made in the semblance of, or designed to be used for and in the place of butter, is imitation butter; . . . no one shall manufacture, have in possession, offer to sell or sell, solicit or take orders for delivery, ship, consign or forward by any common carrier, public or private, and no common carrier shall knowingly receive or transport any such imitation butter, . . . except in the manner and subject to the regulations in this chapter provided.

SEC. 2517. A substitute for butter or cheese not having a yellow color, nor colored in imitation of butter and cheese as prohibited in the next section, may be manufactured, kept in possession, offered for sale, sold, shipped, consigned or forwarded by common carrier . . . if each tub, etc.

SEC. 2518. No one shall color with any matter whatever, any substance intended as a substitute for butter or cheese, so as to cause it to resemble true dairy products, or combine any animal fat, vegetable oil or other substance, with butter or cheese or combine with any substance whatever, intended as a substitute for butter or cheese, anything of any kind or nature, for the purpose or with the effect of imparting to the compound the color of yellow butter or cheese, the product of the milk or cream from cows, or use or solicit orders for delivery, keep for sale, or sell, any such substance so colored, and designed as a substitute for butter or cheese.

The first contention made in argument is that these statutes must be construed together, and that, when so construed, it will be found that they do not apply to traffic in pure unadulterated oleomargarine, but should be held to prohibit the combining of any coloring matter or ingredient with the compound for the purpose of making it resemble butter made from pure milk or cream. Pursuant to this theory, the defendant offered to show that the compound sold by it contained nothing but ingredients which are used in making oleomargarine; that the coloration was due to the presence of natural ingredients necessarily used in the making of the product, and that nothing was placed therein for the purpose of coloring the compound and to give it the resemblance of yellow butter, and nothing added thereto except essential and necessary ingredients of the article known to commerce as "oleomargarine." Objections to this line of testimony offered by the State were sustained, and this necessarily presents the question of the true construction of these statutes. Defendant also offered to prove by an expert that the product sold by it did not bear the color of yellow butter. The State's objection to this was also sustained. A careful examination of the statute quoted, leads us to the conclusion that the legislature not only intended to prohibit the coloration of any substance intended as a substitute for butter, but also to prohibit the sale of any compound made in the semblance of, or designed to be used for and in the place of butter, which bore a yellow color in imitation of that produced from pure milk or cream of cows. But it permitted the sale of such an article of commerce or compound under certain restrictions, so long as it did not bear the color of, or was not colored in imitation of, pure butter. The sale of imitation butter bearing the yellow color of butter made from pure milk or cream is absolutely prohibited; and it is also made an offense for anyone to color any substance intended as a substitute for butter so as to cause it to resemble the true dairy product, or to solicit orders for,

keep for sale or sell any substance so colored. This is the only reasonable construction of these statutes. Any other convicts the legislature of an unnecessary use of words to define a very simple prohibition. Indeed, it is impossible to arrive at any other conclusion, without reading out of these statutes words and sentences which ordinarily would be very plain. There is little room for doubt as to the legislative intent. Moreover, we may well assume that the general assembly had in mind such a possible state of affairs as were here attempted to be shown. The books say that originally pure oleomargarine was almost white in color. Without the introduction of pure butter or coloring matter, the product would be almost white, as we understand it. It was entirely possible to introduce into the product innocuous coloring matter, which would give it the hue of butter, and then to claim, just as was here attempted to be proved, that this coloring matter or substance was a necessary ingredient of the compound, and essential to the product known to commerce as "oleomargarine," and this, in a sense, would doubtless be true. Under such a state of facts it might well be claimed that nothing was introduced into the substance for the purpose of giving it the color of butter. Were such a contention to receive judicial approval, it is manifest that many difficulties would arise in the enforcement of the law.

Looking to the history of this product as contained in standard works of well-recognized authority, it is apparent to our minds that, whatever the present purpose, the original thought was to make oleomargarine so closely resemble butter that the buyer or consumer could not tell the difference, and in the end to increase the sale of the product to the prejudice of pure butter. It may be that, if both were natural products, the legislature could not single out one at the expense of the other; but it surely had power to prevent the sale of a manufactured product, which is made to so resemble another as that the buyer or actual consumer might be deceived thereby, and induced to buy and eat a substance which he would not otherwise have bought or used. The primary object of all such legislation is to secure pure food, and to prevent fraud, deception, and deceit. The sale of oleomargarine is not wholly prohibited by these acts. The only prohibition is against its sale when made in imitation of butter. The manufacturer is not compelled to color it, as he was by the statutes construed in *Collins v. New Hampshire*, 171 U. S., 30, 18 Sup. Ct., 768, 43 L. E. D., 60. Our statutes differ

from those there construed in that they do not provide for adulteration, but simply say that the maker shall not so manufacture it as that it bears the yellow color of pure butter, or color with any matter whatsoever any substance intended as a substitute for butter so as to cause it to resemble the true dairy product. It does not provide for the introduction of any coloring matter, but prohibits it so long as that matter is introduced for the purpose of giving the compound the yellow color of true butter. Remembering that oleomargarine is a manufactured product, made of oleo oil, neutral lard, milk and cream, and pure butter, although true butter is not used in all grades, and that butter and milk and cream or other coloring matter is evidently used for the purpose of giving it the semblance of the true dairy product, it is manifest, we think, that the legislature may so control its manufacture and sale as to provide that no coloring matter shall be introduced for the purpose of securing a similitude of the true product. It was this which the legislature aimed at in enacting the law in question. This being true, there was no error in the instruction given, unless it offends against some constitutional provision; nor in the rulings on the rejection of evidence to which we have heretofore made reference.

The question propounded to the expert as to whether the substance sold bore the yellow color of true butter was not a matter of expert evidence. The law was not enacted for experts, but for the common people, who might be deceived by the appearance of the substitute, and led to purchase something they did not want. Moreover, the product itself was introduced in evidence, and was before the jury. Every one is presumed to know the color of an article which is in such general use as butter, and as to whether or not an article intended as a substitute therefor bears the yellow color of true butter. The case differs materially from *Williams v. Brooks*, 50 Conn., 285, 47 Am. Rep., 642, relied upon by the appellant. That was a copyright case, and there was no statute absolutely prohibiting the use of the article. The question there was one of actual fraud. Here there is no question of actual fraud. Liability to fraud and deceit was the fundamental thought in the mind of the legislature; but the question of deceit in the sale in controversy is not involved.

2. There is but one question left; and that the constitutionality of these statutes so construed. Defendant claims that, so

interpreted, they are unconstitutional, in that they amount to a virtual prohibition of the sale of a legitimate article of commerce and a wholesome article of food; such being an interference with the natural rights of man, and a violation of the privileges secured to him both by the State and Federal Constitutions. The propositions thus presented are not new to the courts. The Supreme Court of the United States, as well as the highest courts in other jurisdictions, have held statutes absolutely prohibiting the sale of oleomargarine constitutional. See *Powell v. Penn.*, 127 U. S., 878, 8 Sup. Ct., 992, 1257, 32 L. Ed., 253; *State v. Addington*, 77 Mo., 118; *Powell v. Com.*, 7 Atl., 913, 60 Am. Rep., 350; *Com. v. Huntley*, 156 Mass., 236, 30 N. E., 1127, 15 L. R. A., 839; *Cook v. State*, 110 Ala., 40, 20 South., 360; *Palmer v. State*, 39 Ohio St., 236, 48 Am. Rep., 429; *People v. Arensberg*, 105 N. Y., 123, 11 N. E., 277, 59 Am. Rep., 483; *State of Ohio v. Capital City Co.*, 62 Ohio St., 350, 57 N. E., 62, 57 L. R. A., 181; *State v. Rockstruck* (Mo.), 38 S. W., 317; *Capital City Co. v. Ohio*, 183 U. S., 238, 22 Sup. Ct., 120, 46 L. Ed., 71. See, also, *State v. Schlenker*, 112 Iowa, 642, 84 N. W., 698, 51 L. R. A., 347; *Butler v. Chambers*, 36 Minn., 69, 30 N. W., 308, 1 Am. St. Rep., 638; *Weideman v. State* (Minn.), 56 N. W., 688. It will be observed that the statutes in question do not absolutely prohibit the sale of oleomargarine, or any other manufactured product, except it be made in the semblance of or having the yellow color of true butter; and no claim is made that oleomargarine can not be properly manufactured without introducing coloring material so that it will not bear this yellow hue. Indeed, as already suggested, we understand that the original product was nearly white. We may therefore leave out of consideration the thought, so diligently and ably argued, that the statutes in question absolutely prohibit the sale of oleomargarine. The idea which underlies the statute in question is the prevention of fraud or deceit; in other words, it is regulation, rather than prohibition. That the legislature has power to regulate the manufacture and sale of articles of food, even though the right to so manufacture and sell be called a natural right, is so well established as not to require the citation of authorities. But see *Jordan v. Dayton*, 4 Ohio, 295; *Gundling v. Chicago*, 177 U. S., 183, 20 Sup. Ct., 633, 44 L. Ed., 725; *State v. Rogers*, 95 Me., 94, 49 Atl., 564, 85 Am. St. Rep., 395. Such legislation is sustained on the theory that it is not practicable, by any ordinary inspection, for the purchaser or con-

sumer to distinguish the genuine from the artificial product; and the only effective means of protecting the public against deception is to be found in the absolute suppression of the business, or such regulation thereof as will secure practically the same results. The police power is very broad, and so elastic that no comprehensive definition has ever been attempted. Of necessity, this must be so, for it must ever respond to such social conditions "as an advancing civilization of a highly complex character requires." Anything which legitimately tends to promote public morals, health, or security is within its scope; and courts should not too closely scrutinize legislative acts, bottomed on this power. Primarily, it is for that department of government to determine what acts are or may be productive of fraud or deceit, and what inhibitions will best secure the public health and safety. But the question is not wholly legislative in character. Such acts are subject to review by the court, and the securities guaranteed by the Constitution must be preserved. Yet in all such controversies there is a broad presumption in favor of the exercise of the power, and courts should only interfere when the acts are palpably in contravention of some constitutional provision. We do not think the act in question offends against any constitutional guaranty. In an opinion written by Mr. Justice White, of the Supreme Court of the United States, which was concurred in by the entire court, an act of the State of Ohio, very similar to the one now before us, was sustained and previous cases from the same court were cited with approval. So much has been written on the subject, and the cases are so harmonious, that we need not attempt to add anything further to what has already been said. The only case which seems to support defendant's contention is *People v. Marx*, 99 N. Y., 377, 2 N. E. 29, 52 Am. Rep., 34. But in that case the statute absolutely prohibited the sale of oleomargarine. A statute somewhat like the one in question was afterward sustained by the same court in *People v. Arensburg*, *supra*. The commerce clause of the Federal Constitution is in no way involved in this controversy. That was eliminated by an act of Congress passed May 9, 1902, c. 748, 32 Stat., 193 (U. S. Comp. St. Supp., 1903, p. 265).

Some question is made regarding the sufficiency of the indictment, and one or two other points are made in argument which have not been separately considered. They are each and all

disposed of by what has already been said, and need not be further noticed.

It follows that there is no error in the record of which defendant may justly complain, and the judgment is affirmed.

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### EFFECT OF NEW OLEO LAW.

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The new National law, putting a tax of ten cents a pound on oleomargarine colored in imitation of butter, and taxing a quarter of a cent a pound oleomargarine free from artificial coloration, has been in force a little over two years. For the year ending June 30, 1902, 126,316,472 pounds of oleomargarine were sold in the United States, and practically every pound of it was colored in imitation of butter and went into competition with the seven hundred or eight hundred million pounds of butter which actually went on the market that year. This was the last year under the old law taxing all oleomargarine two cents a pound.

For the year ending June 30, 1903, the first year under the new law, the output of oleomargarine was 71,804,102 pounds. During this year the manufacturers of oleomargarine were making every effort to push the sale of it and a very greatly increased number of retailers' licenses were taken out in all parts of the country, in an effort to popularize the so-called uncolored oleomargarine. At the same time every effort was made to devise means for avoiding the real intent of the new law and great quantities of oleomargarine were put out colored a light shade of yellow by the use of palm oil.

For the year ending June 30, 1904, the output of oleomargarine has been 48,071,480 pounds, a shrinkage of sixty-two per cent from the figures for 1902.

The manufacturers of oleomargarine have exercised their well known ingenuity and energy in their attacks upon the constitutionality and meaning of this statute. Four cases of extraordinary importance have reached the supreme court of the United States and been decided. The constitutionality of the law in every particular has been upheld, without reservation, by the highest court in the country. The use of palm oil in minute quantities has been declared by this same court to subject the oleomargarine so colored to the tax of ten cents a pound. That is to say, the passage of the law of 1902 was a very great victory for the dairy interests, and this victory has now been confirmed

and established by these decisions of the national supreme court.

Events of the last two years have clearly proved the assertion of the dairy people that while there is a legitimate demand for oleomargarine, most of it has been sold because it was yellow enough to look like butter, and hence, could be sold as butter. Continuously lower prices for butter have thoroughly disproved the assertion of the oleomargarine partisans that a decrease in the amount of oleomargarine on the market would result in greatly increased prices for butter. The dairy interests of the country seem to have at last secured a sufficient and efficient statute controlling the fraudulent sale of any substitute for butter.

It is idle to believe, however, that the fight has been permanently finished. It is a certainty that the manufacturers of oleomargarine will not give up their efforts to continue in the business to the detriment of the dairy business, without further efforts, and these efforts will take the direction of an attempt to repeal the law. There has already been formed an association of all manufacturers, wholesalers and retailers of oleomargarine, with considerable sums of money at their disposal, the object of which is the repeal of this law at the session of Congress which meets before this report can be in the hands of its readers, and doubtless no efforts will be spared to assure the success of their undertaking. If this law is repealed, the State of Iowa will feel its effects more than any other single State in the Union, for the reason that this State produces ten per cent of all the butter made in the United States and nearly twenty per cent of all the creamery butter. We are, therefore, vitally interested in preventing the repeal of this beneficial measure, and the one hundred thousand farmers and others in Iowa who are financially interested in the creamery and dairy business will consult their own interests by opposing in every proper and legitimate manner the repeal of this law. The only organization devoted to this particular matter is the National Dairy Union, well known to the dairymen of Iowa as the organization which is responsible for the passage of this law. The most effective work can be done through the officers of the National Dairy Union and any demands made by them upon the time and influence or money of the dairymen ought to be met. There is great danger that overconfidence will bring disaster. There is a strong possibility that the oleomargarine interests may be able this winter, or

later, to persuade Congress to repeal or modify the National oleo law.

## RENOVATED BUTTER.

### LIST OF RENOVATED BUTTER FACTORIES.

County.	Location.	Firm Name.	Postoffice Address.
1 Calhoun .....	Rockwell City .....	Andrew Wood Co. ....	Rockwell City.
2 Clayton .....	McGregor .....	The J. D. Bickel Produce Co	McGregor.
3 Dallas .....	Redfield .....	Smith Produce Co. ....	Redfield.
4 Des Moines .....	Burlington .....	Iowa Grain & Produce Co. ....	Burlington.
5 Keokuk .....	Sigourney .....	Sigourney Produce Co. ....	Sigourney.
6 Keokuk .....	Keota .....	Keota Produce Co. ....	Keota.
7 Lee .....	Keokuk .....	Iowa Pure Butter Co. ....	Keokuk.
8 Polk .....	Des Moines .....	E. M. Ellingson Co. ....	Des Moines.
9 Polk .....	Des Moines .....	Schermerhorn-Shotwell Co.	Des Moines.
10 Polk .....	Des Moines .....	MacRae Bros .....	Des Moines.
11 Wayne .....	Humeston .....	James L. Humphrey, Jr. ....	Humeston.
12 Woodbury .....	Sioux City .....	N. R. Hathaway .....	Sioux City.

The foregoing is a list of all the factories in this State now engaged in the business of making renovated butter. The list shows one new factory established, and two reported last year are not now in operation. When creamery butter is very high in price there is an easy outlet for large quantities of renovated butter; but when prices of creamery butter are low, as has been the case for the last eighteen months, the demand for renovated butter is small and profits consequently very small. It is asserted by some of the makers of renovated butter that the hand separator has decreased the amount of the stock from which the renovated butter is made, for the reason that the farmer who formerly could not get his milk to a creamery is now easily able to ship his cream to a centralizing plant. This operates to reduce the amount of farm made butter collected by the local merchant.

The output of the renovated factories varies from 14,000 pounds to nearly 3,000,000 pounds, and 65 per cent of the total is made in three factories.

Renovated Butter.	Year ending July 1, 1902—report from nine factories.	Year ending July 1, 1903—report from thirteen factories.	Year ending July 1, 1904—report from twelve factories.
Pounds of renovated butter made .....	4,530,398	9,198,400	8,327,545
Average per factory .....	503,376	707,183	693,629
Sold for consumption in Iowa .....	991,338	2,163,271	983,638
Shipped outside the State .....	3,539,059	7,035,129	7,343,907

The prices of renovated butter for the year ending November 1, 1904, are shown in the table below and compared with the prices of creamery butter.

	Renovated Butter.	Twelve months ending November 1, 1903.	Twelve months ending November 1, 1904.
November.....		21.0 c.	17.60c.
December.....		21.9 c.	18.87c.
January.....		21.5 c.	18.87c.
February.....		18.87c.	17.83c.
March.....		18.87c.	17.83c.
April.....		18.87c.	17.12c.
May.....		18.1 c.	16.62c.
June.....		18.40c.	15.00c.
July.....		17.75c.	15.00c.
August.....		17.0 c.	15.08c.
September.....		17.0 c.	15.85c.
October.....		17.0 c.	16.58c.
Average price per pound.....		17.17c.	16.55c.

SHOWING AVERAGE MONTHLY PRICE OF FANCY WESTERN CREAMERY BUTTER IN NEW YORK MARKET.

Month	Twelve months ending Nov. 1, 1896.	Twelve months ending Nov. 1, 1897.	Twelve months ending Nov. 1, 1898.	Twelve months ending Nov. 1, 1899.	Twelve months ending Nov. 1, 1900.	Twelve months ending Nov. 1, 1901.	Twelve months ending Nov. 1, 1902.	Twelve months ending Nov. 1, 1903.	Twelve months ending Nov. 1, 1904.
November.....	\$ .2330	\$ .2112	\$ .2335	\$ .2337	\$ .2600	\$ .2487	\$ .2412	\$ .2650	\$ .28.17
December.....	.2300	.2250	.2290	.2190	.2720	.2540	.2510	.2920	34.28
January.....	.2266	.2140	.2040	.1975	.2650	.2292	.2425	.2762	22.70
February.....	.2000	.2150	.2042	.2100	.2500	.2250	.2362	.2900	25.17
March.....	.2185	.1900	.1937	.2075	.2550	.2212	.2340	.2890	24.63
April.....	.1650	.1890	.1980	.1962	.1990	.2099	.2325	.2725	22.84
May.....	.1572	.1590	.1580	.1740	.2012	.1900	.2275	.2200	20.13
June.....	.1550	.1500	.1637	.1855	.1950	.1825	.2195	.2160	18.08
July.....	.1505	.1500	.1637	.1855	.1960	.1960	.2131	.2012	17.67
August.....	.1571	.1675	.1890	.2000	.2100	.2050	.1990	.1940	17.93
September.....	.1600	.1940	.2025	.2262	.2150	.2110	.2170	.2075	19.47
October.....	.1850	.2290	.2285	.2400	.2190	.2200	.2362	.2100	20.95
Average value per lb. for each year.....	\$ .1882	\$ .1855	\$ .1971	\$ .2065	\$ .2278	\$ .2165	\$ .2416	\$ .2417	\$ .21.40

The increase in size of our creameries is shown by the following figures, taken from the foregoing tables:

	1900.	1901.	1902.	1903.	1904.
Average pounds of butter per creamery.....	104,918	105,491	104,152	97,770	112,084
Total pounds of butter for all creameries.....	84,965,082	82,714,944	77,885,696	64,575,470	86,017,476

The figures in the above comparison for the year 1904 are exclusive of 9 centralizing plants, which make 5,400,000 pounds of butter, including them, the average amount of butter made in each creamery is 120,538 pounds.

The estimated gross amount of butter, 86,017,476 pounds, includes all the creamery butter made in the state in plants of all kinds.

	1900.	1901.	1902.	1903.	1904.
Number of patrons of creameries .....	91,417	89,876	81,532	72,710	75,981
Average number of patrons per creamery .....	113	114	109	110	130
Total number of cows .....	631,839	627,984	579,700	569,762	587,822
Average number of cows per creamery .....	781	801	775	802	906
Average number of cows per patron .....	7	7	7	8	8

	1902.	1903.	1904.
Average pounds of butter produced by each patron .....	955	899	927

A large number of creameries have this year reported a very low average production per cow. This is especially noticeable in the returns from the centralizing plants and those creameries operating on the hand separator plan.

The nine largest centralizing plants in the State make 5,392,-557 pounds of butter; they have 6,847 patrons. Four of them make 3,422,247 pounds of butter, and report 42,680 cows. These figures will show an average make of butter for each patron of only 788 pounds, and for each cow of 80 pounds, both of which averages are away below the averages of the State, including plants of all kinds.

The following table shows the number of pounds of butter made by all the hand separator creameries reported, except the nine just mentioned above. It shows, also, the number of patrons and the number of cows:

Butter made.	Patrons.	Cows.	Butter made.	Patrons.	Cows.
70,000	107	800	110,448	85	.....
807,000	800	8000	84,878	175	800
248,742	220	1500	100,000	200	1,500
85,703	120	1000	51,780	60	600
82,404	120	1200	200,000	560	.....
148,358	200	.....	248,000	180	.....
89,600	90	600	120,000	70	900
61,981	58	550	72,511	86	800
587,784	600	.....	45,289	80	.....
48,648	50	270	126,800	250	.....
60,000	80	400	265,048	252	1,775
94,180	110	850	106,760	150	1,000
149,752	276	.....	75,000	110	1,300
618,792	750	.....	284,696	372	2,400
120,000	175	.....	197,120	180	1,300
74,634	60	.....	116,954	160	1,250
39,042	66	548	110,786	120	.....
159,693	150	800	124,000	200	1,300
219,696	338	.....			
Total .....	.....	.....	5,640,404	7,028	26,540

These 37 creameries, all hand separator plants, made an average of 152,443 pounds of butter, or an average to the patron of 802 pounds, which is 125 pounds less than the average for all the patrons of the State, including the above creameries.

The 26,540 cows here reported are credited with having produced 2,935,130 pounds of butter, an average of 110 pounds per cow.

Following are some comparisons showing the amount of butter per patron and per cow made in various counties. The figures given are the sum totals and averages for all the creameries in each county which report the three items of butter made, patrons and cows. Allamakee county makes about all her product from gathered cream. The others make their product from whole milk.

County.	Pounds of butter made.	Number of patrons.	Number of cows.	Average pounds of butter per patron.	Average pounds of butter per cow.
Allamakee .....	1,225,611	1,230	9,450	957	129
Bremer .....	1,838,099	747	9,578	1,781	142
Delaware .....	2,373,162	1,862	14,938	1,261	158
Dubuque .....	1,861,621	984	8,550	1,878	188
Pala Alto .....	1,809,551	1,019	8,508	1,287	158

Average 150.

The five counties given above will be recognized as some of the best dairy counties in the state. Similar figures for other counties will be less in the average butter produced by each patron and the average per cow, so that the total average for the State is less than the figures given above.

A study of all the foregoing tables seems to indicate conclusively that the patron who has a hand separator produces less butter on the average than other creamery patrons. Also, that the patron of the hand separator and the centralizing plant produce less butter per cow than other creamery patrons. These figures, of course, are for the amount that he sends to the creamery. He may make a lot of butter at home, which would bring up his average make, but the general result seems to be that the make of creamery butter is very greatly reduced.

It is possible that the changeable character of the patronage of the plants that receive their cream by rail may have caused

more than usual inaccuracy in the figures given above, and that the averages are not quite so low as given above.

The probably reason for this state of affairs is that the man sending cream from the hand separator will discontinue this phase of his dairy operations when the amount of milk to be separated becomes small. Under the same circumstances, a farmer would not discontinue sending milk to the creamery if the milk hauler passes his door every day.

Another table shows the number of hand separators in the State, so far as reported to be 25,887 and the amount of butter made from cream of all kinds, is about 25,000,000 pounds. It will be a very liberal assumption if we credit the 25,000,000 pounds of butter to the 25,000 separators, an average of 1,000 pounds each. This 1,000 pounds of butter represents not more than 25,000 pounds of milk, and assuming that the farmer operates his separator only eight months in the year, or 250 days, he will use it 500 times, and the average amount of milk will be only 50 pounds for each separation. It is easy to suppose that when the milk runs down to ten or fifteen pounds the operator of the separator gets discouraged and doesn't send cream from his separator to the creamery.

However, the question of the use of hand separator is one that the individual determines from the standpoint of his own self interest, and the fact that it reduces the make of creamery butter is not a vital point to him. The enormous increase in hand separators in the State for the last few years indicates that they are very popular, and this popularity could not continue if the farmer was not convinced that he secured an advantage from the use of it.

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#### PRICES PAID FOR BUTTER FAT.

The following table shows the prices paid for butter fat for the several months of the year 1904 by plants all of whose product is made from cream received by rail. Most of these creameries advertise to pay one cent under New York butter prices for butter fat delivered at the creamery, but some of them also agree to meet all competition, so that in some cases the price actually paid is higher than one cent under New York. The cost of shipping cream is, according to the reports, from the managers of these creameries, one cent per pound of butter

fat, the cost varying, of course, with the distance. The railroad distance tariff on milk or cream in cans is as follows:

	5 Gallons.	8 Gallons.	10 Gallons.
Minimum .....	12 cents.	15 cents.	19 cents.
50 miles .....	15 cents.	18 cents.	22 cents.
100 miles .....	24 cents.	27 cents.	31 cents.
150 miles .....	34 cents.	37 cents.	41 cents.

The plants whose prices are given below cover practically the whole State.

CENTRALIZING PLANTS SHIPPING CREAM BY RAIL.

Month.	N. Y. Price.	Cents.	Cents.	Cents.	Cents.	Cents.
January .....	22.70	22.50	22.10	21.75	22.00	20.50
February .....	25.17	25.00	24.40	24.50	24.00	21.40
March .....	24.52	23.50	24.00	23.55	23.00	21.50
April .....	22.84	22.00	22.00	22.00	22.00	22.00
May .....	20.42	19.00	17.25	19.12	18.20	19.00
June .....	18.08	17.00	17.00	17.10	17.20	17.00
July .....	17.07	16.00	16.50	16.75	17.00	16.00
August .....	17.98	16.50	17.00	16.90	17.20	16.25
September .....	19.47	18.00	18.55	18.50	18.20	18.50
October .....	20.95	...	...	19.40	...	...

Month.	Cents.	Cents.	Cents.	Cents.	Cents.
January .....	19.50	22.75	21.65	22.00	20.75
February .....	22.00	26.00	24.25	24.25	23.25
March .....	21.00	23.75	23.44	23.45	22.51
April .....	19.62	22.50	21.97	21.80	21.10
May .....	16.75	19.00	20.50	19.01	18.03
June .....	15.00	18.00	17.12	17.00	16.18
July .....	15.00	17.00	16.75	16.65	15.67
August .....	16.50	17.50	16.75	16.85	16.00
September .....	17.00	18.50	18.12	18.25	17.50
October .....	...	19.50	19.12	...	...

In the following table are found the prices paid by creameries whose product is almost exclusively from milk. The number at the top of each column represents the number of pounds of butter made by these creameries, and the low prices paid in the winter time are accounted by the fact that their run was very small and expense correspondingly high.

WHOLE MILK PLANTS.

Month.	N. Y. Price.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
January .....	22.70	109,114	236,295	158,998	41,074	204,448	108,121
February .....	25.17	22.00	23.00	22.00	19.00	23.00	20.00
March .....	24.52	20.00	21.50	25.00	15.00	25.00	22.00
April .....	22.84	17.00	23.00	24.00	15.00	23.00	20.00
May .....	20.12	16.00	19.00	18.00	14.00	18.50	16.00
June .....	18.08	17.00	17.75	17.00	15.00	18.00	17.00
July .....	17.07	17.00	18.75	16.00	15.00	18.00	17.50
August .....	17.98	18.00	19.00	16.00	16.00	19.50	18.00
September .....	19.47	20.00	21.25	19.00	17.00	21.50	19.00
October .....	20.9	21.00	...	21.00	18.00	...	...

Month.	Cents.	Cents.	Month.	Cents.	Cents.
	22,350	170,000		22,350	170,000
January .....	21.00	23.66	June .....	16.00	17.90
February .....	22.00	26.66	July .....	16.00	17.75
March .....	21.00	23.00	August .....	16.00	18.25
April .....	20.00	21.66	September .....	18.00	19.90
May .....	18.00	18.76	October .....		22.00

The following are prices paid by creameries whose product is made from both milk and cream.

#### COMBINED PLANTS.

Month.	N. Y. Price.	Cents	Cents.	Cents.	Cents.	Cents.	Cents.
		252,084	57,814	44,563	104,000	118,420	67,984
January .....	22.70	21.00		22.50	22.00	21.00	22.00
February .....	23.17	26.00	23.00	24.50	20.00	24.00	21.00
March .....	24.52	23.00	21.00	24.60	23.00	22.50	21.00
April .....	22.84	22.00	20.00	22.70	20.00	21.00	2.00
May .....	20.12	20.00	19.00	19.70	20.00	17.00	19.00
June .....	18.08	19.00	18.00	18.80	18.00	16.50	18.00
July .....	17.67	19.00	18.00	17.70	18.00	15.50	17.00
August .....	17.98	19.00	18.00	19.60	17.00	16.50	16.00
September .....	19.47	21.00	20.00	20.60	17.00	17.50	16.00
October .....	20.95	22.00		23.50	19.00		18.00

In the following table are found prices paid by creameries whose product is exclusively from cream. These prices are for the inch of cream or practically for the pound of butter made.

#### OLD STYLE GATHERED CREAM, PAY BY THE INCH OF CREAM.

Month.	N. Y. Price.	Cents.	Cents.
		212,000	208,302
January .....	22.70	20.00	18.52
February .....	23.17	2.00	20.67
March .....	24.52	20.00	18.64
April .....	22.84	19.00	17.66
May .....	20.12	16.00	14.48
June .....	18.08	15.00	14.32
July .....	17.67	15.00	14.53
August .....	17.98	15.00	15.67
September .....	19.47	16.00	16.46
October .....	20.95	17.00	18.00

In comparing the foregoing prices, it should be remembered that the shipper pays practically one cent a pound on the butterfat as freight, and it will cost him as much time and trouble and expense to take his cream to the depot as it will to take it to the creamery in the same town. Also, that it costs from 2 cents to 2½ cents a pound on butterfat to deliver whole milk at the creamery.

### WHY THE CREAMERIES CLOSE.

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The last three years has seen the finish of a very large number of creameries in the State of Iowa. It is not difficult to tell, in a general way, why these have closed, but following will be found returns from twenty-five creameries giving some information about them and the reasons why they closed, as suggested by their former managers or operators, and this short table will repay considerable study.

Of the first nine on the list, two were burned and not rebuilt, and the reasons given for the closing of the others, seem to indicate that their managers found that they were very expensive to operate. These creameries were creameries with small patronage. In the best of creameries, about a thousand pounds of butter per patron is all that is made, so that the number of patrons here given as the highest that these creameries ever had may represent also the number of thousands of pounds of butter per year they were making at their very best. As has been pointed out in these reports before, the expense per pound for making butter increases very rapidly with the decrease of the number of pounds made. When creameries have no competition, the exact expense per pound for making will not be a very large factor in their success or failure, but when they must compete with creameries having a larger make, or with centralizing plants, to which the cream may be shipped, the expense per pound of making is one of two vital circumstances. The other, of course, is the quality of the butter and the price for which it sells. Those who urge the building of new creameries are fond of saying that a creamery can be successfully operated with 250 or 300 cows. The experience in Iowa the last two or three years, and indeed before the cream shipping system came into vogue, has been that a creamery starting with less than 500 cows is almost certain to fail. Experience also has shown that if the cows are not in the community when the creamery begins, they will not very largely increase in number for a good many years

after the creamery has shown itself to be a success. It is not at all astonishing that the first nine creameries in the following list have gone out of business.

Numbers 10 and 11 were evidently crowded out by the building of new creameries in their territory, or by superior management and energy in the creameries with which they competed locally.

Numbers 12 and 13 were evidently creameries that at one time were doing considerable business, but suffered, as many creameries have suffered, from lack of business ability on the part of the manager. One of the most astonishing things in creamery history in Iowa is that creamery management so many times has fallen into the hands of people who have never given any evidence of business ability of any kind. The fact is that the successful management of a creamery requires business ability of the highest order.

Numbers 14 to 17 were evidently average sized creameries, making, perhaps, a hundred thousand pounds of butter a year, at their best. Three of them closed because of the increased practice of shipping cream, and the other one reopened, as the manager states, because the farmers did not find it profitable to ship their cream. One is led to suspect that the statement that the centralizers are responsible for the closing of the creameries, has been overworked. In another part of this report are found prices paid for butterfat by various kinds of creameries in this State, from which it may be argued that the local creamery of sufficient size, under good management, can and does easily compete with the creamery that receives its supply of cream by rail.

The last eight creameries reported in the following table seem to indicate a general falling off in the interest of the dairy business, rather than a decrease in the number of cows or in a disastrous competition of any kind:

Number.	Number of years creamery was operated.	Greatest number of patrons at any one time.	Has there been a decrease in the practice of dairying?	Is there enough milk and cream in your territory to operate a creamery?	Is the milk sent to competing local creameries?	Is it shipped to a centralizing plant?	General Reasons for Closing.
1	1	65	Yes..	No..	No..	No..	Farmers will not milk.
2	3	38	No..	Yes..	No..	Yes..	Milk hauling too expensive.
3	4	65	No..	Yes..	No..	Yes..	Milk hauling too expensive.
4	6	30	No..	Yes..	No..	Yes..	Can not compete with centralizers.
5	3	60	No..	Yes..	No..	No..	Creamery built by creamery sharks.
6	3	70	No..	Yes..	No..	Yes..	Creamery built by creamery sharks.
7	5	70	Yes..	Yes..	No..	Yes..	Poor management.
8	3	85	Yes..	Yes..	No..	Yes..	Creamery burned and too little patronage to pay to rebuild.
9	15	72	Yes..	Yes..	Yes..	Yes..	Local competition too great.
10	10	135	No..	Yes..	Yes..	No..	If a creamerie surrounding. Can not compete.
11	10	130	Yes..	Yes..	Yes..	Yes..	Poor management by directors.
12	13	120	Yes..	Yes..	No..	Yes..	Poor management by owner.
13	5	150	Yes..	Yes..	Yes..	No..	Reopened. Not profitable to patronize centralizers.
14	9	100	No..	Yes..	No..	No..	Can not compete with centralizers.
15	10	100	Yes..	Yes..	No..	Yes..	Can not compete with centralizers.
16	6	105	Yes..	Yes..	Yes..	Yes..	Hand separators and cream shipping.
17	18	100	No..	Yes..	No..	Yes..	
18	3	103	Yes..	No..	Yes..	No..	
19	2	91	No..	Yes..	Yes..	No..	
20	23	210	Yes..	No..	Yes..	Yes..	
21	12	192	Yes..	Yes..	No..	Yes..	General decrease in milk production. Cattle high in price. Times too prosperous for milking cows.
22	20	400	Yes..	Yes..	No..	No..	
23	3	330	Yes..	Yes..	Yes..	Yes..	
24	5	98	No..	Yes..	No..	Yes..	
25	8	209	Yes..	Yes..	Yes..	Yes..	

### COST OF MAKING POUND OF BUTTER.

The reports of this office show that the cost of making butter in the various creameries of the State are as follows:

Creamery making 40,000 lbs.	cost of making is 4. cents.
Creamery making 50,000 lbs.	cost of making is 8.4 cents.
Creamery making 60,000 lbs.	cost of making is 8. cents.
Creamery making 70,000 lbs.	cost of making is 2.88 cents.
Creamery making 80,000 lbs.	cost of making is 2.86 cents.
Creamery making 90,000 to 125,000	cost of making is 2. cents.
Creamery making 150,000 lbs.	cost of making is 1.85 cents.
Creamery making 175,000 lbs.	cost of making is 1.65 cents.
Creamery making 200,000 and above	cost of making is 1.44 cents.

It is evident from these figures that the smaller creamery can not long exist where there is competition of any kind. The possibility of making butter for a cent and a half a pound makes

the continued existence of a creamery whose expense is three or four cents a pound, impossible. The tendency is, and must be, under present conditions, toward increase in size of our creameries and we must look, in the future, for larger creameries and, naturally, not so many of them.

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### CREAM TEST BOTTLES.

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The centrifugal test machines now on the market are very highly improved and do satisfactory work if run at a proper speed and are probably as good machines as are necessary. Originally the test machines were made on a ten-inch radius but since the standard bottle for either milk or cream is but six and one-half inches in length at the most, the modern machines are made on a radius of eight or eight and one-half inches. Any increase in the length of the test bottle used requires the use of a tester made on a ten-inch radius, and a depth about four inches more than the ordinary machines so that the bottles may stand upright. The twenty-inch machine for the use of the nine-inch bottles are found in practice to be quite expensive, both in first cost and in the cost of the larger and more fragile long bottles. They are the most suitable, however, for cream testing, for with them one can use a nine-inch bottle reading to 55 per cent and get fairly close reading, or the operator can use a nine-inch 30 per cent bottle with a half weight of cream and double the reading, and get a reading almost as close as that of the ordinary milk test bottle. But most creameries still have machines of smaller size and use the standard length bottle.

This bottle is not more than six and one-half inches long. The bottom of it to the zero mark is three inches long. The scale, whether it is a milk bottle, a 30, 40, or 50 per cent cream bottle, must be put in the other three or three and a quarter inches and is rarely more than two and three-quarters inches long. One of the curiosities of glassware in the possession of this department is a thirty per cent cream test bottle on which the scale reads to half per cents, and so has sixty marks on it, is but one and five-eighths inches long. This makes the lines on the scale a little more than one-fortieth of an inch apart. While this bottle may be, as advertised, accurately calibrated it is evident that accurate reading can not be done on a scale of this kind.

The ordinary milk bottle has a scale from two to two and three-quarters inches long and this gives about as small a diameter to the neck as can be used in a milk bottle. It does not seem to have occurred to the manufacturers of glassware that they could make a Babcock bottle that did not have a three inch bottom and a two and three-quarter inch scale, and so nine-tenths of our creameries are reading cream tests in 30 per cent or 50 per cent straight-necked bottles having the scale of this length, a length so short that an error in reading equal to the thickness of an ordinary blotter means an error of one-twentieth or one-twenty-fifth in the number of dollars they shall pay the patron. Testing with such apparatus is at best only a means of guessing at the real butterfat value of the cream.

The cuts herewith given illustrate some modifications of the cream test bottles designed in the office of this department. Bottles represented in Fig. A and Fig. B have about the standard length bottoms but the whole length of the neck, three and one-half inches, is utilized for the scale, making closer readings possible. Bulb neck bottles have never been popular for the reason that they are not easily read with the dividers for the reason that the bulb must always be kept inside the points of the dividers and the reading must sometimes be made from some other point than the zero mark. A thirty or forty per cent bulb would give a still smaller neck and closer reading for the rest of the scale but would not be practicable because one does not know before he begins whether he will have fat enough in the bottle to more than fill the bulb or not. Using a bottle having a 20 per cent bulb, cream that tests 20 per cent or less may be read in the part of the scale below the bulb, and cream that tests more than 20 per cent may be read by floating the fat higher so that it fills the bulb. This requires some care in filling the bottles but is entirely practicable.

A large number of operators of cream tests are using a 30 per cent bottle with a half weight of cream and doubling the reading. There are two modifications of the cream test bottle that may be used when this method is followed. The bottom of the bottle may be reduced in length, thus making the neck and scale so much the longer; and the scale may be doubled on the bottle so that the operator may not be required to perform the mental operation of multiplying his reading.

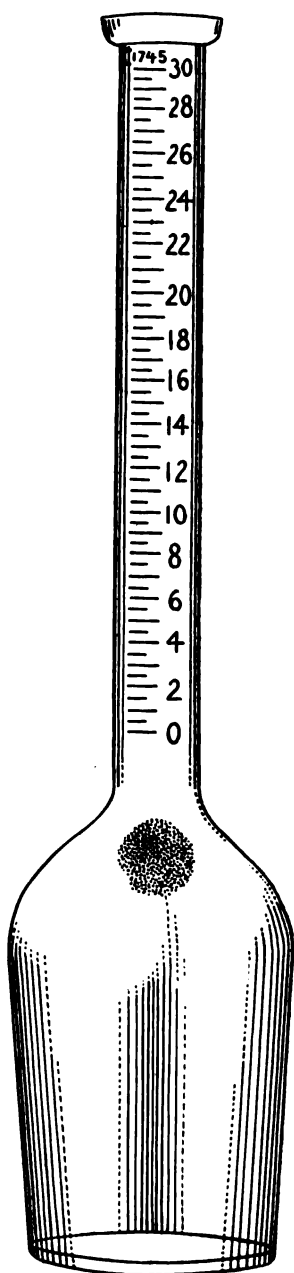


FIG. A.

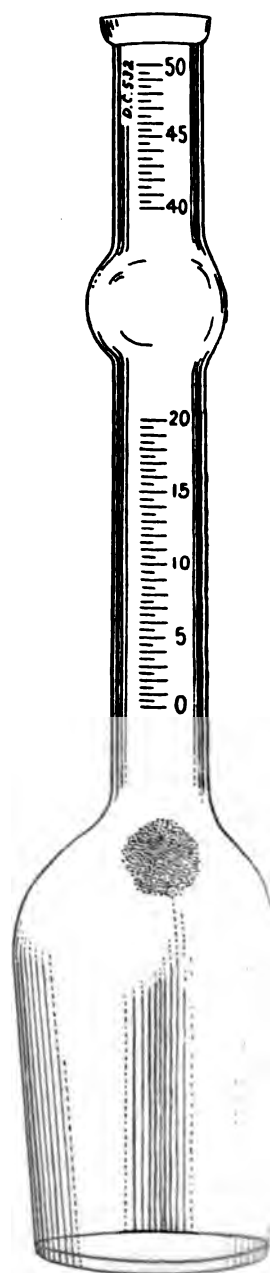


FIG. B.

The bottom of a standard bottle contains about fifty cubic centimeters, or about three pipettes full. Having in it the necessary eighteen grams of cream and sufficient acid, it is about two-thirds full. But if one is to use nine grams of cream and a half charge of acid the capacity may be reduced to thirty or thirty-five cubic centimeters and still give room to thoroughly mix the cream and acid. This will make the bottom a little more than two inches and the scale about four inches. If then the neck has a capacity sufficient for a 25 per cent bottle instead of something larger, and if the scale be written to 50 per cent the divisions will be one hundred in four inches or one twenty-fifth of an inch apart, which is practically what the divisions are on a short scale milk bottle. This scale will, therefore, read to one-half per cent as easily as the short scale milk bottles will to two-tenths. Closer readings are possible but not practicable. If the ordinary scale is put on the bottle and the reading doubled then the results will always be in whole per cents. But if the scale is doubled on the bottle the reading may be to half per cents and, hence, a more accurate result obtained. Such a bottle as here illustrated will have a narrow neck and errors arising from the meniscus will be small. Fig. C fully illustrates these modifications.

Still closer readings of butterfat may be had if the errors arising from the meniscus can be eliminated. In reading *milk* test we have been taught to read all the butterfat there is in sight, regardless of the fact that there is a curve at the top of the fat column, and reading to the top of the column gives too great a reading. This apparent error is more apparent than real for the reason that a small quantity of fat always remains in the liquid and compensates for the high reading. Experiments have shown that this apparent error amounts to about .2 on the milk bottlescale, but amounts to as much as one and a half per cent on a straight-necked 50 per cent bottle, and of course less on bottles of other sizes. These errors, if all the meniscus is read, are present in the bottles illustrated in Figs. A, B, and C. If the reading is taken immediately after the machine stops, before the fat has time to cool, the bottom of the fat column is a straight line, and if the top of the bottle be made smaller in diameter as shown in Fig. D, so that the meniscus shall be no more than in a milk bottle, the reading may be made as accurately as in a milk bottle. In using such a bottle, the fat column should be floated up as near to the zero

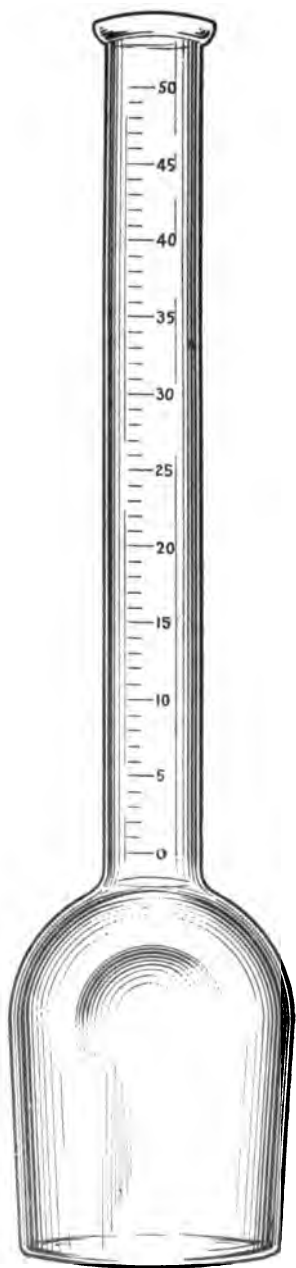


FIG. C.

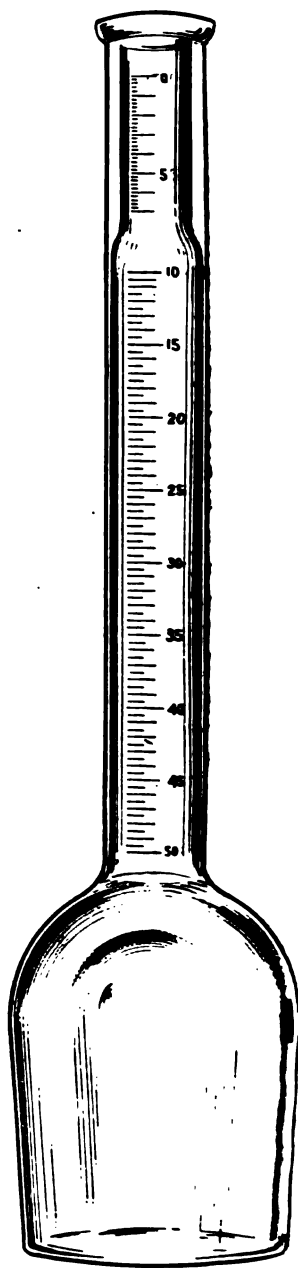


FIG. D.

mark as practicable. The reading at the top and that at the bottom must be taken and the one subtracted from the other to get the correct reading. The scale on the bottle, shown in the illustration, is doubled so that with nine grams of cream the reading may be taken direct, and may be as close as two-tenths of one per cent, the same as is shown on the scale of a milk bottle. By this means errors arising from the meniscus are entirely avoided. With such a bottle the dividers could not be used at all, and a mental calculation would be necessary with every test; otherwise the bottle will be entirely practicable.

In handling cream it is well to reverse the pipette, because the tapering point of the ordinary pipette will not admit the more solid portions of the cream and errors are thus made when the cream has not been made as smooth as it should have been. Or a pipette made on the model of Fig. E, and made to hold a little less than nine grams of cream, would be useful and easily handled.

#### TESTING BUTTER TO SHOW THE OVER RUN.

Butter may be tested with the Babcock test exactly as cream is tested and without extra apparatus if only approximate results are to be shown. But with ordinary test bottles reading to 50 per cent, the errors are usually considerable, and it is difficult to handle melted butter with the pipette and still get a fair sample for the reason that the water in melted butter separates very quickly. If after the butter is tested and the reading is made the overrun is figured still more serious errors may be made. An error of one or one and a half per cent may easily be made in the reading on account of the meniscus, and an error of one per cent in the reading will make a difference of nearly three per cent on the overrun when that is figured out. That is, with the ordinary bottle, with its possible and probable error of one or more per cent in reading, the operator would know what his overrun was only within the limit of three per cent, which is too great an error when the overrun probably varies only from 12 to 20 per cent at the most.

In order to eliminate from the operation of butter testing as much as possible the probable errors due to handling melted butter with a pipette, and the varying errors arising from the uncertain reading of a deep meniscus the following modification of the apparatus is suggested. Fig. F is a long-stemmed cup, some-



FIG. E.



FIG. F.

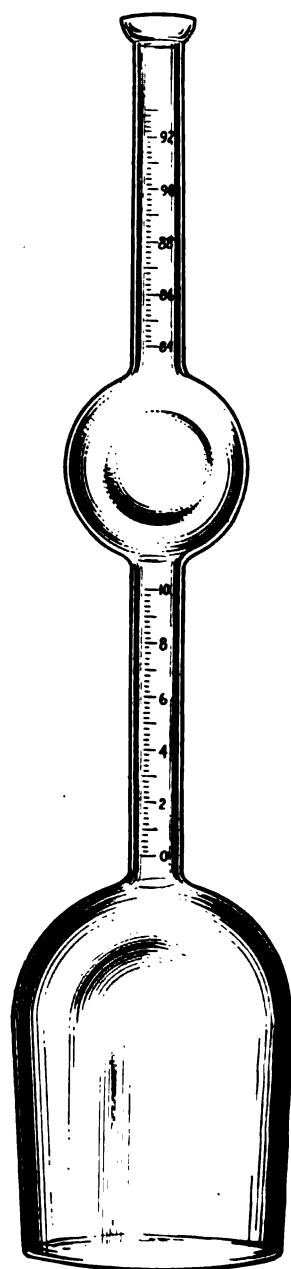


FIG. G.

thing like a pipette cut in two in the middle, of such a size as to hold about nine grams of butter. Having been balanced together with the bottle shown in Fig. G, upon a cream scale, it is then filled with butter by using it exactly in the manner of a butter trier. The stem of the cup is then placed in the neck of the bottle on the scale and by adding or subtracting a very little butter the exact weight of nine grams is easily secured. The whole apparatus is then placed in a tester. The heat of the steam soon melts the butter and it runs into the bottle. A small amount of acid should then be added and the test is completed as any cream test. The bottle shown in figure G, is so graduated that the per cent of butterfat may be read at once and read to two-tenths of one per cent. The neck of the bottle is the same size as that of a milk test bottle and the error in the meniscus will not be more than two-tenths of one per cent, which makes a possible error of about three-tenths of one per cent in the overrun when that is figured out. This form of apparatus will be found to be sufficiently accurate for work in the creamery and its use is so simple that it can be used every day in checking up the amount of overrun in the churning. Reports to this office show that the overrun varies as much as ten per cent. from one month to another in some of our creameries. The difference in prices paid, which results from this variation in the overrun will certainly create dissatisfaction among the patrons. If the overrun can be made about the same every day the prices will be more uniform and satisfactory. But the buttermaker can do little to make it uniform if he has to wait till the end of the month for the secretary to figure out the amount of butterfat before he can tell what his overrun is. If some apparatus for the determination of the overrun were in use in every creamery the results would be valuable.

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## THE PIPETTE IN CREAM TESTING.

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### CREAM SCALES.

Before the advent of the hand separator, the Babcock test for milk was in use in ninety per cent of the creameries of the state. The Babcock test for cream in the days when cream meant the hand skimmed product, was never popular and never in any large degree supplanted the old oil test churn, notwith-

standing the fact that with proper handling it is much simpler and much more accurate. The testing of cream by this system, if practiced at all, was only for the purpose of determining the richness of the cream approximately as it came from the factory separator. The use of the hand separator and the revolution which it has effected in the manner of the marketing the product of the cow, has very greatly increased the use of the Babcock test for ascertaining the butterfat value of cream.

It was long ago pointed out that testing milk and testing cream by the Babcock method were two vastly different operations. The cream, being a much more valuable product, would seem to require more careful and accurate testing than the milk, but it has been almost the universal practice to use methods in cream testing apparently without thinking or caring whether they were likely to produce accurate results.

The use of the pipette for measuring the cream in cream testing, and the use of short scale, wide-necked 50 per cent. bottles has resulted in very great inaccuracies. The Babcock test supposes that eighteen grams of milk or cream shall be put into the bottle. The 17.6 c.c. pipette will deliver eighteen grams of milk with as great accuracy as can be secured if the milk is weighed into the bottle for testing. The 17.6 c.c. pipette will deliver *less* than eighteen grams of cream, under the best of circumstances. If the cream is very rich, it will be so thick that a very large portion of it will stick to the inside of the pipette. If it is slightly sour, it will have in it gas bubbles, and if it be stirred or poured to make it smooth and uniform, it will carry air bubbles; or, if the cream is reasonably thin, free from air bubbles or gas bubbles arising from acidity, the pipette will still deliver less than eighteen grams of cream, for the reason that cream is lighter than milk, and since 17.6 cubic centimeters of milk will weigh eighteen grams, 17.6 cubic centimeters of cream of any degree of richness will weigh less than eighteen grams, and the richer the cream the less will be the weight of the pipette full, even supposing that all of it is delivered into the bottle. *Hence, the use of a 17.6 c.c. pipette results in tests which are too low.*

The 18 c.c. pipette was long ago suggested as the proper measure for cream for the Babcock test, and when the word "cream" meant hand skimmed cream, the 18 c.c. pipette was reasonably accurate, although not strictly so, because hand skimmed cream varied from 14 per cent to 20 per cent only, and

the 18 c.c. pipette would deliver very nearly eighteen grams of such cream. But it will not deliver eighteen grams of cream that tests 25 per cent, 35 per cent or 50 per cent and, as before, the richer the cream the less weight the 18 c.c. pipette will deliver, *and hence, the greater inaccuracy in the way of tests that are too low.*

If cream to be tested were uniformly free from air bubbles and gas bubbles, it would be possible to make a correction sheet, the use of which would correct the errors arising from the too small capacity of the 17.6 c.c. or 18 c.c. pipette, but this unfortunately is not the case, and so the correction tables which have been used to some slight extent, can not be relied upon, for the reason that the error to be corrected is not always the same. Thus, a sample of cream which is sweet and smooth and free from bubbles and which really tests 40 per cent butterfat, would show perhaps in the cream test bottle a test of 38 per cent if the cream were measured into the bottle by using the 17.6 c.c. pipette. The same sample of cream, if allowed to sour, or if poured or stirred violently to make it smooth, will show anywhere from 32 per cent to 36 per cent or 37 per cent in the test bottle, if it is measured into the bottle by means of the 17.6 c.c. pipette. That is to say, the use of any pipette in cream testing is not even a reliable method of guessing at the butterfat contents of the cream.

Under present conditions cream is purchased at local creameries, whose whole product is made from cream thus received and tested; it is purchased at local creameries, part of whose product is milk tested by the Babcock method; it is shipped by individual shippers from a few miles to seventy-five or one hundred miles to a centralizing plant, and in a great many cases it is sold to a local agent of the centralizing plant, who weighs and tests the cream in the presence of the seller. It thus comes about that cream is tested by a great many people who are far from experts in the use of the Babcock test, and as the use of the pipette in testing cream produces results which are uniformly too low, the one so purchasing cream has an unfair advantage over his competitor who makes an accurate test, for the reason that he does not pay for all he gets. The law of this State very properly covers a case of this kind. There is a general statute providing penalties for the use of any false weight or measure, and a specific statute in regard to the use of a

chemical test to determine the amount of butterfat in milk or cream received or purchased.

SECTION 2523. *Milk test.*—Any person or corporation, or the employe of such person or corporation, who operates a creamery or cheese or condensed milk factory, and uses a chemical test to determine the quantity of butter-fat in milk purchased, used or received, shall so use only such tests as shall be clear oil, free from any foreign substance, and produce correct measurements of butter-fat, and every such person or persons using a milk test shall procure from the dairy commissioner for each factory so operated one standard tube or bottle, and one standard measure or pipette, for testing milk, certified and marked by him as in this chapter provided, which shall be kept for inspection by the patrons, and used by such person or corporation in testing or verifying test tubes or bottles and milk measures or pipettes used. In any action arising between such operator and patron, the burden of establishing the use of reliable tests and the results therefrom, equivalent to the standard herein provided, shall be upon the operator.

The attorney general states that the word "milk" in the above statute includes "cream" as well.

This statute refers to the use of a *chemical* milk test and as the Babcock test is the only chemical milk test in use in Iowa at present the practical application is to that test. The old oil test churn is not a chemical milk test and, hence, the statute does not apply to that. This section provides that every operator of the chemical milk test shall produce "correct measurements of butterfat." This will necessitate the use of a correct scale in cream testing and correct glassware. The dairy commissioner is required by law to furnish at cost to each operator a standard for testing the glassware for accuracy, so that there may be no excuse, except neglect, for the use of inaccurate bottles or pipettes of any kind for milk or cream testing.

This State has many dead creameries that would still be in operation if the patrons could have been made to believe that they were getting fair treatment in regard to the matter of the test. The importance of the test in buying either cream or milk is so great that self interest, as well as respect for the laws, should lead every operator of the test to provide himself with perfect and proper apparatus, and to so use the same that perfect and accurate results may be obtained. The importance of correct testing to the dairy business as a whole is so great that the law very properly provides a maximum penalty of six months' imprisonment or \$500 fine for violation of the statute quoted above. The dairy commissioner hopes to give wide pub-

licity to this statute so that prosecutions of offenders may not be necessary.

Some of the central plants discover that even when the pipette is used in testing they do not receive at the churning room as much butterfat as the receiving agent pays for, and so the farmer gets paid for more fat than he actually delivers. Hence it is argued that the pipette method ought to be satisfactory to the seller of the cream. These facts do not at all alter the statute requiring accurate testing nor affect what is required to make an accurate test. Doubtless the losses as outlined above occur because the sample is taken from the farmer's can in a slovenly manner. If the cream in the can is properly mixed, so that it is made uniform and smooth, the sampling is easily and accurately done.

Cream scales are at the best expensive and hard to keep in order. Most of them will do good work when new and in perfect order. None of them will do good work if the bearings are allowed to become rusty. A good cream scale should be so constructed that it may easily be taken apart and the bearings cleaned. It ought to be arranged to carry not more than one bottle on a side, and the cream ought to be weighed against the eighteen or nine gram weight and not against the weight of the cream that has just been put into the other bottle. The slide weights for balancing ought to be of small size. A scale that will weigh a drop or two of cream will not be found with balance weights that weigh a pound or two. A scale that will not act quickly will not weigh accurately and probably weighs too heavy. The operator having balanced the scale will continue to put cream in the bottle until that side goes down, which requires more weight than a sensitive scale will.

The following suggestions for cream testing are quoted from Bulletin 58, Bureau of Animal Industry, National Department of Agriculture:

#### CONDENSED DIRECTIONS FOR MAKING FAT TESTS OF CREAM.

##### SAMPLING:

- (1) Uniform composition and texture of cream is necessary.
- (2) This is obtained by pouring from one pail or can to another.
- (3) Frozen cream must be thawed before it can be sampled.
- (4) Churned cream can not be successfully sampled.
- (5) The tube sampler gives surest results.
- (6) The dipper sampler does well if the cream is thoroughly mixed.
- (7) Cream adhering to outside of tube should not get into sample jar.

- (8) The tube should be blown out with steam or rinsed with hot water before using each time.
- (9) Keep the top of the tube open while it goes down, so it may fill as fast as lowered.

#### KEEPING THE SAMPLES:

- (1) Sample jars must have tight-fitting covers and be kept tight.
- (2) If cream is dried in bottles it is evidence that covers are not tight enough to prevent escape of moisture.
- (3) Preservatives ~~must be~~ thoroughly mixed with cream; if too thick, heat the jars.
- (4) Do not shake the bottle to mix the cream; give it a rotary motion.
- (5) It is best to have samples protected from extreme heat or cold.
- (6) Churned cream gives only approximate results; dried cream gives too high results.
- (7) Extreme hot weather and lack of attention may cause separation of whey.
- (8) Do not take too large samples; it is a waste of cream.
- (9) Look after samples every day and see that they are in proper shape.

#### PREPARING SAMPLE FOR MEASURING INTO TEST BOTTLE:

- (1) Sample must be absolutely uniform throughout.
- (2) Heat sample to about 100° F., or until it is quite fluid.
- (3) If sample is weighed a much higher temperature may be used.
- (4) Pour from one cup to another until uniform.
- (5) The hotter the sample the more fluid it will be and the easier to make uniform.
- (6) Take care that no cream remains in sample jar adhering to the sides.
- (7) If sample is lumpy, press lumps through a fine wire sieve (such as is used for a teapot strainer).
- (8) Melt any churned samples, mix, and sample quickly.
- (9) Make things convenient for this work and see that it is thoroughly done.

#### MEASURING INTO TEST BOTTLE:

- (1) Weighing the sample is the only method that will give correct results.
- (2) Use delicate balances and keep them in perfect order.
- (3) Test weights and scales for accuracy before using.
- (4) Torsion balances are very accurate; weigh one test at a time.
- (5) Less than 9 grams may be used, but 9 or 18 grams are more convenient.
- (6) Air and gas bubbles in cream cause pipette tests to be inaccurate.
- (7) Specific gravity of cream causes pipette tests of cream to be too low.
- (8) Tables for correcting specific gravity are in use, but they do not correct for error caused by air and gas.
- (9) Weighing corrects all difficulties due to specific gravity and air or gas in cream.
- (10) Use great care to get the weights exactly right.

**MAKING THE TEST:**

- (1) Use enough acid to make a clear fat column; determine by trial.
- (2) Use condensed steam or rainwater for filling bottles.
- (3) After adding acid, fill bottles at once to bottom of neck with water at about 120° F., and then whirl five minutes.
- (4) Then add water of same temperature to bring fat within scale, and whirl two minutes.
- (5) Keep the temperature down to 120° F. while whirling.
- (6) Have a hole drilled in top of testor to insert thermometer.
- (7) Run the tester at as high speed as bottles will stand.
- (8) For hand tester put in boiling water when beginning to test till it nearly reaches the bottles.
- (9) For steam tester raise the lid slightly while making the test.
- (10) When through whirling keep tester closed, so as to maintain heat even as possible.

**READING THE TEST:**

- (1) See that line between fat and water is straight, and read from bottom to extreme top of fat column.
- (2) Read the depth of meniscus and deduct four-fifths of it from previous reading. A careful operator can estimate this.
- (3) Add 0.2 per cent to the result.
- (4) For 9-gram sample, double reading before adding 0.2 per cent.
- (5) Read at a temperature close to 120° F.
- (6) If bottles are placed in bath to regulate temperature, allow them to stand for fifteen minutes before reading.

**THE TEST BOTTLES:**

- (1) Use as narrow-necked bottles as possible, to get wide divisions of scale.
- (2) The 30 per cent 9-inch bottles graduated to 0.2 per cent are most accurate.
- (3) Use 9-gram charge with these, doubling the reading.
- (4) The 50 per cent 9-inch bottles are next in accuracy, graduated to 0.5 per cent.
- (5) The 30 per cent, 40 per cent, and 50 per cent 6-inch bottles are too inaccurate in results.
- (6) In wide necks the scale divisions are too close together and errors are more probable.
- (7) All bottles should be tested for correctness of calibration.
- (8) With cheap bottles nearly half are not correct.
- (9) Bottles guaranteed correct can not all be depended upon.

**CONCLUDING NOTES.**

Little more need be said except that there is still much work to be done to make a perfect cream test, free from the objections noted in this bulletin. The subject of preservatives for composite samples of cream is one that needs the attention of the chemists. A test bottle that will overcome the objectionable features noted is a study for some genius to work upon. A bottle

of uniform diameter would greatly simplify matters as they stand, so that a uniform correction could be made for all tests. The great importance of careful work in all details should be urged upon every user of the test. The amount of butterfat that may adhere to the bottle and remain below the neck should be studied and a large number of experiments made to determine the facts in the case. The common defects observed in field work were improper sampling, poor sample jars, the pipette method used in measuring samples, the test read too high and at too high temperature, and carelessness all along the line.

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### CREAM SAMPLING.

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The sampling of cream for testing is a very important factor for correct testing, it is impossible to obtain an accurate test of a batch of cream unless the sample to be tested is absolutely correct. It is a very much more difficult matter to obtain a correct sample of cream than it is to obtain a correct sample of milk owing to the fact that most of the creamery operators take the sample of cream direct out of the cream can instead of pouring the cream into a weighing can as is usually done with the milk which mixes the milk and makes it ready for sampling.

The more fat there is in cream, the more difficult it is to obtain a correct sample on account of the cream being thicker. After cream has stood a short time in a can it separates from what milk or water there might have been mixed in it. The richest cream is on top and on the bottom of the can the cream is very light in butterfat. I have seen nothing but water at the bottom of the cream, which is due to water being used to flush the separator bowl.

The way to obtain a correct sample of the cream is either to pour the cream from one can to another a few times to thoroughly mix it, or use a rod or a heavy wire with a disk fastened on one end. The disk to be a trifle smaller than the opening in a ten-gallon can. The disk should be put down into the cream and worked quite vigorously with an up and down motion, and then immediately a sample taken for testing. This way is practiced in several of the large creameries with good satisfaction.

The practice of stirring the cream with a short handled dipper should be condemned as it is not possible to obtain a correct sample. The tin tube sampler or what is called a milk thief is not satisfactory unless the cream is first thoroughly mixed before the sample is taken.

P. H. K.

## THE HANDLING OF HAND SEPARATED OR GATHERED CREAM.

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We have now a great many creameries in our State that are making butter from hand separated or gathered cream. The butter from these creameries is not, as a rule, of as good quality as the butter is from whole milk cream. There ought not to be such a great difference in the quality of the butter from these creameries as there is at the present time. A creamery that is receiving enough cream so that it will pay to operate it should put forth every effort to improve the quality of the cream and make the butter in a practical and up to day manner. They should not be satisfied until they make just as good butter as the whole milk creamery. It may be proper to offer some suggestion how best to handle this cream.

The first important point is that cream should be of good quality, as the better the cream the better the butter. The cream should be kept at a low temperature until delivered to the creamery and every creamery should have a fixed time in the day when the cream should arrive and not be allowed to string in during the whole day and evening as then it will be impossible to properly handle the cream at the creamery. As soon as the cream begins to arrive at the creamery, the pasturizer should be started and the cream pasturized at 170° to 180° and immediately cooled to 50° and from the cooler run into a cream vat in which there is a 20 per cent starter which was previously prepared. It should be then well mixed and after four hours it should be churned out. In case the cream comes in perfectly sweet it will be all right to allow it to remain in the vat over night. If, however, somewhat sour it should not be allowed to remain in the vat over four hours. The above method is followed in some of our best creameries with good success.

P. H. K.

### HAND SEPARATORS.

In the following table are given some facts as reported by the creameries. It is not intended that this report is absolutely complete, but so far as hand separators are reported by the creameries that report at all, the figures are, of course, correct. Hence, the number of hand separators here given is less than the number of hand separators in actual use, because there must have been some,—probably a good many,—that are not reported at all. Another indication of the growth of the hand separator in the State is found in the number of creamery separators reported. In 1897, 514 creameries reported that they were using 1,316 separators. This year, 516 creameries show only 816 separators. About thirty-nine or forty per cent of Iowa's butter product is made from hand separator cream. Last year's report shows thirty-eight exclusive hand separator creameries, which number has increased to seventy this year. The number of creameries shipping cream by rail has increased also from forty-five to sixty-one.

TABLE No. 1.

Counties.	No. of creameries reporting hand separators.	Hand separators reported.	No. of exclusive hand separator creameries.	No. receiving cream by rail.
THE STATE.....	388	25,887	70	61
Adair.....	8	420	...	...
Adams.....	5	592	3	...
Allamakee.....	0	463	2	...
Appanoose.....	2	100	1	1
Audubon.....	8	229	1	2
Benton.....	1	6	...	...
Black Hawk.....	...	...	...	...
Boone.....	...	...	...	...
Bremer.....	...	...	...	...
Buchanan.....	6	157	...	1

TABLE No. 1—CONTINUED.

Counties.	No. of creameries reporting hand separators.	Hand separators reported.	No. of exclusive hand separator creameries.	No. receiving cream by rail.
Buena Vista .....	8	886	2	...
Burler .....	11	1,041	1	...
Calhoun .....	5	89	...	1
Carroll .....	5	690	2	1
Cass .....	2	46	...	...
Cedar .....	4	157	...	2
Cerro Gordo .....	4	81	1	1
Cherokee .....	4	205	8	1
Chickasaw .....	19	777	...	1
Clarke .....	...	...	...	...
Clay .....	5	208	1	1
Clayton .....	15	1,858	8	8
Clinton .....	6	120	...	2
Crawford .....	2	1,026	2	2
Dallas .....	8	88	...	1
Davis .....	...	...	...	...
Decatur .....	1	109	1	1
Delaware .....	8	168	1	1
Des Moines .....	...	...	...	...
Dickinson .....	8	111	...	1
Dubuque .....	8	1,061	2	2
Emmet .....	5	100	1	2
Fayette .....	8	824	1	1
Floyd .....	8	220	...	...
Franklin .....	6	248	...	1
Fremont .....	...	...	...	...
Greene .....	1	7	...	...
Grundy .....	6	155	...	...
Guthrie .....	7	820	...	...
Hamilton .....	5	88	...	1
Hancock .....	7	802	1	1
Hardin .....	7	851	...	1
Harrison .....	1	18	...	...
Henry .....	...	...	...	...
Howard .....	8	840	...	...
Humboldt .....	11	292	...	...
Ida .....	2	195	1	...
Iowa .....	8	89	...	...
Jackson .....	11	675	1	2
Jasper .....	1	25	...	...
Jefferson .....	1	60	...	...
Johnson .....	...	...	...	...
Jones .....	11	260	...	...
Keokuk .....	...	...	...	...
Kossuth .....	17	828	1	2
Lee .....	...	...	...	...
Linn .....	18	881	2	1
Louisa .....	...	...	...	...
Lucas .....	...	...	...	...
Lyon .....	2	190	...	1
Madison .....	...	...	...	...
Mahaska .....	1	175	1	1
Marion .....	...	...	...	...
Marshall .....	8	226	...	1
Mills .....	...	...	...	...

TABLE No. 1—CONTINUED.

County.	No. of creameries reporting hand separators.	Hand separators reported.	No. of exclusive hand separator creameries.	No. reporting cream by rail
Mitchell .....	6	367	.....	1
Monona .....	1	37	.....	.....
Monroe .....	1	23	.....	.....
Montgomery .....	.....	.....	.....	.....
Muscatine .....	1	18	.....	.....
O'Brien .....	2	445	1	1
Osceola .....	2	340	1	1
Page .....	1	300	1	1
Palo Alto .....	6	96	.....	.....
Plymouth .....	3	117	.....	.....
Pocahontas .....	4	278	3	1
Polk .....	4	1,786	2	2
Pottawattamie .....	4	774	2	.....
Poweshiek .....	4	314	1	1
Ringgold .....	.....	.....	.....	.....
Sac .....	2	427	.....	2
Scott .....	.....	.....	1	.....
Shelby .....	6	531	3	.....
Sioux .....	6	908	5	2
Story .....	5	93	.....	.....
Tama .....	2	252	1	1
Taylor .....	2	750	2	2
Union .....	1	49	.....	.....
Van Buren .....	.....	.....	.....	.....
Wapello .....	1	3	.....	.....
Warren .....	1	3	.....	.....
Washington .....	1	4	.....	.....
Wayne .....	1	50	1	1
Webster .....	1	20	2	2
Winnebago .....	6	90	.....	.....
Winnechiek .....	10	702	.....	.....
Woodbury .....	.....	.....	2	2
Worth .....	2	97	.....	.....
Wright .....	5	413	2	1
THE STATE .....	333	25,897	70	41

TABLE NO. 2.

In the following table is reported the number of patrons and the number of cows, together with the number of creameries reporting on these items, so that some idea may be gained of the relative size of the creameries, and from this table it appears that the average creamery of the State has 998 cows tributary to it, which are owned by 130 patrons. Creameries of Iowa have a larger average patronage and make a larger average amount of butter than the creameries of any other State.

The table also shows the number of creameries using a commercial starter. If there is one thing more certain than another in modern creamery operation, it is that the intelligent use of a commercial starter very greatly improves the quality of the butter and so increases its market value and the amount of money the patrons of that creamery shall receive. Only the most skillful expert can have success with a "home-made" or "buttermilk" starter. The most skillful expert can not make as good butter without a commercial starter as he can with it, and the same thing is true of every other buttermaker of reasonable skill in making butter. The entry blanks of the winners of all the contests that have occurred for a number of years have shown they were using a commercial starter, and the statements of those who score around 85 very generally show the lack of any starter. The neglect to use the best obtainable commercial starter is a penny wise, pound foolish policy. It costs the creamery and the creamery patrons money not to use the most improved methods.

The other items in this table do not lead one to suppose that the best methods are universal in Iowa creameries.

TABLE No. 2.

TABLE SHOWING NUMBER OF PATRONS, COWS, CREAMERIES USING ACID TEST, CREAMERIES THAT PASTEURIZE THE SKIMMED MILK AND CREAMERIES THAT USE A SKIMMED MILK WEIGHER.

Counties.	No. of creameries reporting.	No. of patrons reported.	No. of creameries reporting number of cows	No. of cows reported.	No. of creameries using commercial starter.	No. of creameries using test for acidity of cream	No. of creameries that pasteurize skimmed milk.	Using skimmed milk weigher.
THE STATE.....	516	66,798	861	380,587	160	180	194	228
Adair.....	8	1,187	5	7,281	4	4	2	4
Adams.....	1	220	..	..	..	..	..	..
Allamakee.....	7	1,569	6	9,450	8	2	..	..
Appanoose.....	..	..	..	..	..	..	..	..
Audubon.....	9	1,080	9	8,300	8	5	7	3
Benton.....	8	404	1	860	1	2	1	..
Black Hawk.....	15	2,674	11	8,918	6	6	8	11
Boone.....	2	185	2	1,500	2	2	2	1
Bremer.....	19	1,298	13	9,973	5	9	4	12
Buchanan.....	10	1,689	2	1,913	8	6	8	5
Buena Vista.....	8	414	8	8,900	2	1	1	..
Butler.....	17	1,810	10	8,820	8	4	7	9
Calhoun.....	6	819	4	2,481	8	2	2	4
Carroll.....	8	985	4	1,880	4	8	2	6
Cass.....	2	180	..	..	..	..	..	..
Cedar.....	5	510	4	2,790	1	..	1	1
Cerro Gordo.....	8	613	2	4,342	..	..	..	..
Cherokee.....	8	210	2	700	..	1	1	..
Chickasaw.....	16	2,461	10	10,715	8	4	6	6
Clarke.....	..	..	..	..	..	..	..	..
Clay.....	6	565	8	1,400	8	3	5	2
Clayton.....	15	2,481	11	18,250	8	5	2	2
Clinton.....	8	587	8	8,815	6	7	7	8
Crawford.....	2	1,026	..	..	2	1	..	..
Dallas.....	8	871	2	2,800	2	2	2	2
Davis.....	..	..	..	..	..	..	..	..
Decatur.....	1	175	..	..	..	1	..	..
Delaware.....	20	1,882	17	14,968	9	11	13	9
Des Moines.....	..	..	..	..	..	..	..	..
Dickinson.....	4	818	8	1,550	1	2	2	2
Dubuque.....	17	984	17	8,550	8	8	..	7
Emmet.....	8	475	5	3,278	1	..	2	7
Fayette.....	17	2,680	14	16,407	6	8	11	7
Floyd.....	8	680	2	2,830	1	..	..	..
Franklin.....	8	969	5	8,800	4	3	3	2
Fremont.....	1	..	..	..	..	..	..	..
Greene.....	1	53	1	350	..	1	1	..
Grundy.....	6	649	5	8,940	2	8	3	4
Guthrie.....	8	1,181	5	4,140	..	4	6	6
Hamilton.....	6	798	6	5,065	4	2	2	1
Hancock.....	8	682	7	4,848	2	2	2	3
Hardin.....	10	1,201	7	9,175	4	3	7	5
Harison.....	2	141	2	980	..	2	1	2
Henry.....	..	..	..	..	..	..	..	..
Howard.....	9	1,280	5	6,589	3	2	3	2

## NUMBER OF PATRONS, COWS, ETC.—CONTINUED.

Counties.	No. of creameries reporting.	No. of patrons reported.	No. of creameries reporting number of cows.	No. of cows reported.	No. of creameries using commercial starter.	No. of creameries using test for acidity of cream.	No. of creameries that pasteurise skimmed milk.	Using skimmed milk weigher.
Humboldt.....	10	846	10	5,730	2	4	5	9
Ida.....	2	215	2	1,450	1	1	1	1
Iowa.....	6	648	6	5,040	5	2	1	6
Jackson....	11	1,200	9	7,976	6	6	6	7
Jasper.....	2	175	1	800				
Jefferson.....	8	235	2	955	1	1		1
Johnson.....								
Jones.....	18	1,868	9	14,618	8	8	2	7
Keokuk.....								
Kossuth.....	20	1,848	15	8,188	4	7	10	16
Lee.....								
Linn.....	14	1,197	11	7,325	5	5	7	10
Louisa.....								
Lucas.....								
Lyon.....	2	240	2	1,200	1	1	1	1
Madison.....								
Mahaska....	1	200	1	1,500	1	1	1	1
Marion.....								
Marshall.....	4	631	3	8,495	1	2		1
Mills.....								
Mitchell.....	8	1,614	8	11,746		1	1	1
Monona.....	1	46	1	450	1	1	1	
Monroe.....	1	118	1	650				1
Montgomery.....								
Muscatine.....	1	200	1	950				
O'Brien.....	4	442	3	2,100	2	2	1	8
Oceola.....	1	147	1	1,000				
Page.....	1	400						
Palo Alto.....	18	1,197	12	8,508	8	6	8	10
Plymouth.....	4	811	3	1,915	1			8
Pocahontas.....	4	282	3	1,850	1		1	2
Polk.....	4	898	3	6,150	1	1		
Pottawattamie.....	2	540	1	890	1	1	2	2
Poweshiek.....	4	423	2	1,050	3	4	3	
Ringgold.....								
Sac.....	9	849	6	4,238	3	2	3	1
Scott.....	2	220						
Shelby.....	3	842	3	2,190	2	2	2	
Sioux.....	5	994	5	8,182	4	2	1	1
Story.....	8	822	7	5,362	3	2	3	8
Tama.....	4	470	3	7,250	2		2	1
Taylor.....	1	625						
Union.....	1	854						
Van Buren.....								
Wapello.....	1	73	1	800				
Warren.....	2	95	1	275			2	
Washington.....	1	140	1	1,200				
Wayne.....								
Webster.....	2	180	1	900			1	
Winnebago.....	3	968	7	7,892				
Winneshek.....	12	2,536	9	18,862	3	4	5	6
Woodbury.....	2	3,233	2	84,900	2	2		
Worth.....	9	820	9	6,257	4	4	5	8
Wright.....	6	598	4	2,980	1		1	
The State.....	516	66,798	391	380,557	169	180	194	223

## COMPARISONS.

	1899.	1900.	1901.	1902.	1903.	1904.
Number of patrons of creameries.....	90,964	91,417	89,876	81,532	73,710	75,921
Average number of patrons per cream'ry	116	118	114	109	110	120
Total number of cows .....	623,512	681,829	637,984	579,700	530,732	537,322
Average number of cows per creamery	804	781	801	775	822	806
Average number of cows per patron...	7	7	7	7	8	8

TABLE No. 3.

The dairy commissioner very greatly regrets that it is impracticable to get an absolutely perfect report of the butter made in the State. The many changes in the management of creameries makes it impossible in some cases for the report to be given. It has been the policy of this department to secure as complete a report as possible and then to assume that the creameries that do report make up a fair average for all the creameries of the State. The following table will show the very great increase in the amount of butter made from cream, as well as an increase in the amount of butter made by each creamery, all of which, of course, was to be expected. The rapid growth of the use of the hand separator and the tendency towards concentration in the creamery business are both well known. About forty per cent of our butter is made from cream, mostly of the hand separator variety; the remainder is still made from whole milk.

As shown by previous reports of this office, and by the succeeding table as well, about ten per cent of the creamery butter is consumed in the State, and more than half of this amount by the patrons of the creameries themselves.

TABLE No. 3.

TABLE SHOWING NUMBER OF POUNDS OF MILK RECEIVED, NUMBER OF POUNDS OF CREAM RECEIVED, POUNDS OF BUTTER MADE, AMOUNT PAID TO PATRONS FOR MILK AND CREAM, POUNDS SOLD TO PATRONS IN IOWA AND SHIPPED OUTSIDE THE STATE, SO FAR AS REPORTED BY THE CREAMERIES.

Counties.	Number reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, its Value and Market for Same.				
				Pounds of butter made.	Amount paid to patrons for milk and cream.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the State.
THE STATE....	516	775,087,880	84,028,976	62,222,487	9,884,548	3,487,505	2,884,192	54,650,760
Adair.....	8	10,018,172	499,820	627,519	180,445	27,212	15,986	584,880
Adam.....	.....	.....	.....	.....	.....	.....	.....	.....
Allamakee.....	6	4,509,970	4,069,746	1,225,611	206,820	87,101	16,596	1,171,924
Appanoose.....	.....	.....	.....	.....	.....	.....	.....	.....
Audubon.....	9	17,044,887	828,487	1,063,550	187,626	88,196	8,747	1,488,610
Benton.....	1	53,819	90,088	60,068	3,888	2,087	7,247	20,800
Black Hawk.....	15	80,823,847	1,994,873	1,965,462	325,395	124,071	855,044	1,375,377
Boone.....	2	4,522,734	12,183	208,259	84,229	10,798	20,018	172,448
Bremer.....	19	47,152,141	12,183	2,107,848	810,007	196,654	28,562	1,882,433
Buchanan.....	9	82,884,378	1,888,047	1,967,293	325,506	154,828	20,898	1,786,522
Buena Vista.....	8	1,981,204	1,071,222	839,078	54,054	16,936	6,500	815,623
Butler.....	15	82,163,000	1,058,121	1,508,783	210,458	124,766	52,656	1,881,364
Cahoon.....	5	2,908,626	617,189	782,736	43,471	6,696	3,748	772,827
Carroll.....	8	5,517,143	1,484,859	794,711	117,528	45,596	19,800	729,375
Cass.....	2	1,823,928	40,900	84,687	12,587	8,968	.....	80,669
Cedar.....	5	4,829,481	487,488	813,564	47,588	8,169	30,005	275,397
Cerro Gordo.....	4	.....	1,700,211	436,881	76,986	10,732	89,984	895,686
Cherokee.....	3	.....	1,088,480	279,384	49,085	8,586	19,486	255,812
Chickasaw.....	16	29,651,806	4,932,951	2,549,243	481,268	189,239	61,382	2,238,773
Clarke.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay.....	6	6,088,260	288,525	865,462	64,254	70,592	17	294,858
Decatur.....	17	25,250,831	6,928,606	2,974,653	407,427	80,841	45,868	2,848,457
Clinton.....	8	10,802,629	810,815	549,168	73,040	18,886	21,768	514,069
Crawford.....	2	.....	2,890,847	768,544	109,620	1,117	.....	787,437
Dallas.....	8	3,966,626	238,490	294,694	45,552	6,145	45,696	242,958
Davis.....	.....	.....	.....	.....	.....	.....	.....	.....
Decatur.....	1	.....	860,000	120,000	20,000	2,000	118,000	.....
Delaware.....	20	59,060,568	418,518	2,719,790	470,808	227,640	50,134	2,405,236
Des Moines.....	.....	.....	.....	.....	.....	.....	.....	.....
Dickinson.....	8	3,470,815	117,551	208,070	19,669	17,797	1,114	188,159
Dubuque.....	19	80,862,054	171,856	1,467,054	246,689	88,501	40,246	1,352,307
Emmet.....	8	7,751,556	862,526	437,220	49,498	86,801	2,546	196,073
Fayette.....	17	49,801,212	984,458	2,507,727	421,025	206,888	50,788	2,244,141
Floyd.....	8	.....	1,080,000	501,214	98,790	29,890	1,500	409,815
Franklin.....	7	9,669,777	1,851,881	606,196	105,794	37,002	889	571,253
Fremont.....	.....	.....	.....	.....	.....	.....	.....	.....
Greene.....	1	1,231,480	8,480	60,000	10,000	1,050	8,260	55,690
Grundy.....	7	14,183,480	708,816	754,947	110,529	72,814	4,068	675,571
Guthrie.....	7	12,075,464	556,645	727,048	122,362	85,665	88,581	657,797
Hamilton.....	6	18,400,877	151,520	642,280	105,986	182,126	8,451	506,688

TABLE NO. 3.—CONTINUED.

Counties.	Number reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, its value and Market for Same.				
				Pounds of butter made.	Amount paid to patrons for milk and cream.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the State.
Hancock.....	8	4,446,198	1,186,208	543,542	\$ 82,400	18,109	8,311	531,222
Hardin.....	11	17,708,819	1,079,838	791,990	164,800	81,867	82,970	577,188
Harrison.....	2	1,967,865	84,516	95,555	16,842	7,426	85,686	53,508
Henry.....								
Howard.....	9	11,839,686	2,400,000	1,018,560	167,068	26,247	1,621	985,498
Humboldt.....	11	10,000,273	1,111,981	754,800	104,545	48,287	689	708,894
Ida.....	2	480,000	568,000	216,883	88,241	6,210		20,000
Iowa.....	6	10,815,957	201,898	594,164	88,684	126,788	25,951	441,885
Jackson.....	12	19,311,412	1,553,716	1,286,845	205,048	18,401	8,575	1,204,000
Jasper.....	2	4,049,747	20,000	182,971	29,080	11,394	5,592	165,955
Jefferson.....	8	2,347,148	296,936	280,237	32,710	10,977	12,000	257,580
Johnson.....								
Jones.....	18	48,286,904	1,570,940	2,658,799	410,701	108,761	86,165	1,465,873
Keokuk.....								
Kossuth.....	21	32,070,908	1,087,648	1,698,905	282,917	155,986	23,384	1,519,585
Lee.....								
Linn.....	14	18,991,427	600,464	1,080,987	171,050	51,979	238,558	740,400
Louisia.....								
Lucas.....								
Lyon.....	2	1,148,524	491,689	178,085	81,451	5,400	1,500	171,165
Madison.....								
Mahaaka.....	1		400,000	100,000	17,500	6,000		94,000
Marion.....								
Marshall.....	4	2,144,155	1,679,000	494,915	90,428	10,916	32,488	451,511
Mills.....								
Mitchell.....	8	440,000	1,425,986	1,425,986	229,392	50,255	43,873	1,332,108
Monona.....	1	58,000	81,532	25,800	8,914	390	1,491	2,913
Monroe.....	1	1,597,523	40,400	76,829	18,250	2,691	1,319	72,419
Montgomery.....								
Muscatine.....	1	451	451,960	112,980	12,970	540	80,650	81,770
O'Brien.....	5	3,972,640	1,258,000	518,478	86,188	19,988	8,796	498,807
Oscola.....	1	1,800,000	181,532	118,760	9,187	1,800		
Page.....	1		2,000,000	588,000	117,800		67,000	531,000
Palo Alto.....	18	29,505,473	167,828	1,414,671	247,277	137,866	46,980	1,390,135
Plymouth.....	4	5,546,449	287,084	302,811	54,989	13,512	9,800	273,690
Pocahontas.....	4	960,000	806,160	73,280	20,390	2,696	1,000	54,594
Polk.....	4	236,233	3,084,198	876,100	148,440	6,836	202,186	608,686
Pottawattamie.....	3	609,256	968,561	807,181	51,719	2,936	250,502	73,708
Poweshiek.....	4	2,960,886	1,116,982	388,562	63,624	2,580	2,580	373,432
Ringgold.....								
Sac.....	8	2,827,000	1,458,500	558,964	102,489	20,968	171,000	392,081
Scott.....								
Shelby.....	6	6,578,540	1,270,909	637,946	98,822	36,743	10,858	590,345
Sioux.....	6	264,881	2,425,242	920,446	154,055	15,990	7,734	894,532
Story.....	8	16,508,104	350,490	807,236	144,660	87,894	15,48	704,261
Tama.....	2	2,423,958	98,064	208,640	88,801	1,086	1,000	268,554
Taylor.....	8		3,060,000	724,897	111,715	1,000	3,700	723,197
Union.....	1	689,082	102,160	54,512	9,512	2,219	854	62,288
Van Buren.....								
Wapello.....	1	1,010,000	7,025	47,500	8,048	2,100	30,889	14,541
Warren.....	2	1,200,000		53,732	9,678	2,860	15,832	25,700
Washington.....	2		432,000	107,611	16,776	130	15,000	54,491
Wayne.....	2	6,187,577	200,000	586,878	60,000	2,200	1,200	333,473
Webster.....	1	952,725	875,000	100,395	15,498	4,234	6,000	90,109
Winnebago.....	8	19,188,014	1,214,886	925,010	147,402	103,866	80,058	791,073

TABLE No. 3—CONTINUED.

Counties.	Number reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, its Value and Market for Same.				
				Pounds of butter made.	Amount paid to patrons for milk and cream.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the State.
Winnebago ....	12	7,850,000	1,920,015	1,920,015	\$ 816,209	16,542	18,514	1,894,969
Woodbury .....	2	.....	4,740,000	2,718,680	458,873	600	150,000	2,565,080
Worth .....	12	12,761,618	754,591	1,488,508	185,012	59,237	2,208	1,457,073
Wright .....	6	1,167,956	1,523,644	463,066	76,461	23,215	12,237	419,614
The State....	516	775,087,590	84,023,976	62,222,457	\$9,884,548	3,487,505	2,884,192	54,650,760

## CHEESE MAKING.

Cheese making in Iowa has never reached any great proportions, and the industry, though small, has been still further decreased by the general conditions that have decreased the make of butter. There are now forty-one cheese factories in the State, only a few of which are making more than fifty thousand pounds of cheese. The total cheese reported by thirty-six of these factories is 1,809,030, for which they have paid their patrons \$156,428. Most of the cheese factories of the State are making cheese principally for local and immediate consumption. The number of cheese factories in the State has been steadily decreasing for quite a number of years.

TABLE No. 4.

TABLE SHOWING NUMBER OF COWS FOR EACH COUNTY AND FOR THE STATE FOR THE YEARS 1900, 1901, 1902, 1903, 1904, AND VALUES FOR 1904.

Figures are from the reports of county auditors to the state auditor for the Years 1900, 1901, 1902, 1903 and 1904.

Counties.	Number.	Value.	Number.			
	1904.	1904.	1900.	1901.	1902.	1903.
THE STATE.....	1,373,496	\$30,675,501	1,370,083	1,423,848	1,382,242	1,295,980
Adair.....	17,299	894,926	17,013	17,724	16,192	14,050
Adams.....	11,084	253,237	11,926	12,524	11,887	10,768
Allamakee.....	14,185	236,729	15,699	13,946	13,550	12,677
Appanoose.....	12,573	350,568	11,598	12,012	11,910	10,988
Audubon.....	13,204	297,738	13,283	13,073	12,920	11,581
Benton.....	16,789	409,919	17,959	18,698	18,668	17,407
Black Hawk.....	18,047	453,293	17,993	19,072	18,647	17,807
Boone.....	14,899	299,196	14,239	15,169	15,543	15,081
Bremer.....	17,900	425,857	17,605	17,492	17,989	17,671
Buchanan.....	15,917	373,219	16,566	17,316	17,605	17,254
Buena Vista.....	14,497	297,809	15,028	15,914	15,046	14,094
Butler.....	16,024	331,312	15,554	15,497	16,157	15,964
Calhoun.....	11,892	249,399	13,784	14,215	13,544	12,390
Carroll.....	15,031	304,980	16,558	15,325	16,172	14,497
Cass.....	13,971	238,906	14,290	14,446	13,372	12,290
Cedar.....	16,637	424,176	16,615	17,929	17,807	16,475
Cerro Gordo.....	12,132	242,596	12,718	12,253	12,609	11,795
Cherokee.....	11,999	248,476	12,466	13,577	13,999	11,743
Chickasaw.....	14,890	357,651	14,890	15,773	15,582	15,807
Clarke.....	9,544	217,740	10,168	10,701	10,296	9,397
Clay.....	11,794	283,046	12,110	12,464	12,788	11,689
Clayton.....	22,652	532,192	21,794	21,714	21,696	20,350
Clinton.....	19,500	470,065	19,541	19,705	19,588	19,197
Crawford.....	17,261	368,512	17,844	16,917	16,197	14,997
Dallas.....	13,888	299,539	15,152	15,846	14,169	13,708
Davis.....	10,525	258,048	10,090	10,390	10,253	9,377
Decatur.....	13,354	292,746	13,210	14,015	17,331	12,040
Delaware.....	21,923	444,376	21,384	20,896	21,163	20,301
Des Moines.....	8,941	299,968	8,779	8,694	8,501	7,798
Dickinson.....	6,463	154,690	6,503	7,010	6,542	6,198
Dubuque.....	19,415	469,805	18,169	18,054	19,095	17,844
Emmet.....	7,423	148,302	7,598	7,080	6,712	5,894
Fayette.....	22,399	537,596	21,798	23,018	22,575	23,238
Floyd.....	11,482	235,198	12,008	12,462	12,604	12,060
Franklin.....	13,027	297,523	13,630	13,801	13,056	12,117
Fremont.....	8,846	190,644	8,744	8,603	8,214	7,497
Greene.....	13,498	275,180	.....	4,903	13,873	12,955
Grundy.....	14,248	326,624	14,559	15,177	15,214	14,773
Guthrie.....	15,925	342,530	16,197	17,354	15,961	14,525
Hamilton.....	14,757	309,759	15,237	16,099	15,585	14,441
Hancock.....	11,114	177,958	11,530	11,573	11,160	10,098
Hardin.....	14,643	294,987	15,519	17,113	15,625	14,699
Harrison.....	13,891	273,312	4,335	14,996	14,214	13,631
Henry.....	8,374	203,864	8,294	8,793	8,909	8,621
Howard.....	12,636	236,629	12,688	13,051	13,031	11,695

TABLE No. 4—CONTINUED.

Counties.	Number.	Value.	Number.			
	1904.	1904.	1908.	1902.	1901.	1900.
Humboldt .....	10,816	\$ 212,810	10,096	11,681	11,206	10,868
Ida .....	8,593	305,841	8,940	9,472	9,808	8,165
Iowa .....	16,815	408,244	16,986	17,175	17,862	15,457
Jackson .....	17,180	427,165	16,884	16,759	16,370	15,877
Jasper .....	17,889	452,098	18,089	18,862	17,974	16,201
Jefferson .....	9,170	221,718	9,110	9,665	9,806	8,228
Johnson .....	17,173	439,206	7,898	17,549	17,897	17,430
Jones .....	18,823	459,904	17,787	18,175	19,045	18,484
Keokuk .....	18,907	327,281	14,779	14,922	14,208	18,840
Kossuth .....	20,415	406,815	21,230	22,912	21,497	19,846
Lee .....	11,624	291,649	11,118	10,868	10,626	10,570
Linn .....	21,208	522,474	21,212	22,071	20,658	20,646
Louis .....	7,196	185,980	7,845	7,675	7,256	6,701
Lucas .....	9,911	206,586	10,138	10,237	9,837	9,238
Lyon .....	10,640	236,554	10,724	10,869	9,231	8,239
Madison .....	13,088	290,606	13,768	15,388	14,095	13,800
Mahaska .....	15,650	292,060	18,676	18,919	18,775	12,840
Marion .....	12,500	314,316	13,068	13,226	12,697	11,225
Marshall .....	15,804	339,044	15,891	16,496	15,557	14,167
Mills .....	9,301	222,488	9,255	9,808	9,089	8,568
Mitchell .....	11,777	237,321	11,664	12,008	11,744	11,196
Monona .....	11,097	222,580	11,651	12,325	11,578	11,757
Monroe .....	9,832	244,044	9,027	9,981	9,163	8,222
Montgomery .....	10,630	214,584	10,864	10,863	10,402	9,907
Muscataine .....	10,273	298,586	10,228	9,193	11,040	10,104
O'Brien .....	12,871	285,670	17,723	12,895	12,366	11,023
Oceola .....	7,168	148,490	7,142	7,118	6,485	5,831
Page .....	14,048	342,627	13,661	14,097	11,875	12,766
Palo Alto .....	18,008	250,062	18,773	14,764	14,569	14,805
Plymouth .....	18,046	365,080	17,868	16,848	16,299	14,598
Pocahontas .....	12,854	247,845	13,498	14,068	14,191	12,790
Polk .....	16,005	367,351	15,682	15,498	14,815	13,616
Pottawattamie .....	22,479	589,496	21,933	22,366	21,878	18,886
Poweshiek .....	15,649	380,180	15,973	16,220	15,327	14,736
Ringgold .....	12,433	277,795	12,525	13,832	12,723	12,311
Sac .....	15,537	332,661	15,615	16,548	15,472	14,666
Scott .....	14,674	405,301	14,717	14,869	14,965	14,204
Shelby .....	17,594	368,215	16,674	17,960	17,117	15,195
Sioux .....	17,332	375,108	16,839	16,137	14,838	13,409
Story .....	14,505	296,822	15,032	16,017	15,112	14,394
Tama .....	13,039	422,071	16,461	18,066	17,974	17,023
Taylor .....	13,230	278,445	13,777	12,321	13,458	11,833
Union .....	11,114	247,804	12,024	12,735	11,590	11,344
Van Buren .....	9,772	240,507	9,184	9,247	9,099	8,773
Wapello .....	9,795	219,135	9,672	9,577	9,608	8,925
Warren .....	13,542	335,052	14,888	15,106	14,084	13,022
Washington .....	13,219	281,219	12,331	11,267	12,973	12,620
Wayne .....	13,409	296,419	13,418	14,064	14,650	13,173
Webster .....	15,273	331,165	16,156	16,135	15,488	14,028
Winnebago .....	11,072	177,491	11,519	11,769	10,450	9,368
Winnebuck .....	19,397	465,840	13,613	13,864	12,089	17,809
Woodbury .....	14,739	296,237	15,073	16,158	16,106	13,835
Worth .....	11,124	224,040	11,536	11,880	11,680	11,536
Wright .....	12,430	247,420	12,586	13,796	13,749	12,191
The State .....	1,373,496	\$80,675,501	1,370,082	1,423,848	1,362,242	1,236,900

Average value of cows, \$22.33.

The assessors classify as follows: Heifers one year old, 502,573, average value, \$12.46.  
 Heifers two years old, 324,470, average value, \$17.44. Cows, 1,373,496.

TABLE No. 4.

TABLE SHOWING NUMBER OF COWS FOR EACH COUNTY AND FOR THE STATE FOR THE YEARS 1900, 1901, 1902, 1903, 1904, AND VALUES FOR 1904.

Figures are from the reports of county auditors to the state auditor for the Years 1900, 1901, 1902, 1903 and 1904.

Counties.	Number.	Value.	Number.			
	1904.	1904.	1900.	1900.	1901.	1900.
THE STATE.....	1,373,406	\$30,075,501	1,370,063	1,423,343	1,362,242	1,206,980
Adair .....	17,330	384,986	17,012	17,794	16,193	14,080
Adams .....	11,064	251,257	11,923	12,534	11,887	10,763
Allamakee .....	14,185	345,729	13,639	13,345	12,550	12,677
Appanoose .....	12,373	350,568	11,533	12,013	11,910	10,988
Audubon .....	13,304	267,738	13,232	13,073	12,920	11,621
Benton .....	16,789	409,919	17,050	13,096	13,053	17,407
Black Hawk .....	15,047	433,203	17,903	19,073	13,647	17,807
Boone .....	14,869	299,186	14,239	15,109	15,543	13,631
Bremer .....	17,900	425,357	17,005	17,492	17,969	17,671
Buchanan .....	15,917	373,219	16,566	17,316	17,605	17,234
Buena Vista .....	14,497	297,909	15,023	15,914	15,046	14,094
Butler .....	16,024	321,312	15,554	15,497	16,157	15,054
Calhoun .....	11,892	249,339	13,753	14,215	13,544	12,330
Carroll .....	15,031	304,990	15,533	15,325	16,173	14,467
Cass .....	13,671	233,906	14,390	14,446	13,373	12,239
Cedar .....	16,687	424,176	16,615	17,039	17,807	16,475
Cerro Gordo .....	12,132	242,536	12,713	12,233	12,609	11,795
Cherokee .....	11,969	246,473	12,433	13,377	13,909	11,743
Chickasaw .....	14,330	357,651	14,390	15,773	15,532	15,307
Clarke .....	9,554	217,740	10,163	10,701	10,296	9,397
Clay .....	11,794	233,046	12,110	12,464	12,733	11,639
Clayton .....	22,452	532,192	21,724	21,714	21,098	20,350
Clinton .....	19,500	470,065	19,541	19,703	19,533	19,107
Crawford .....	17,261	353,512	17,344	16,917	16,197	14,997
Dallas .....	13,533	299,539	15,152	15,346	14,169	13,703
Davis .....	10,525	253,043	10,030	10,390	10,233	9,377
Decatur .....	13,354	232,746	13,210	14,015	17,331	13,040
Delaware .....	21,923	444,376	21,534	20,336	21,163	20,391
Des Moines .....	8,341	239,933	8,779	8,634	8,501	7,736
Dickinson .....	6,463	154,669	6,002	7,010	6,543	6,133
Dubuque .....	19,415	469,305	13,169	13,054	19,095	17,344
Emmet .....	7,423	143,302	7,533	7,030	6,712	5,394
Fayette .....	22,399	537,596	21,703	23,013	22,375	22,233
Floyd .....	11,432	235,133	12,006	12,433	12,004	12,330
Franklin .....	13,027	267,323	13,030	13,301	13,036	12,117
Fremont .....	8,346	190,644	8,744	8,302	8,214	7,497
Greene .....	13,433	275,150	.....	4,903	13,373	12,955
Grundy .....	14,243	320,624	14,559	15,177	15,214	14,773
Guthrie .....	15,325	343,539	16,197	17,354	15,931	14,325
Hamilton .....	14,757	309,739	15,237	16,099	15,535	14,441
Hancock .....	11,114	177,953	11,530	11,373	11,160	10,003
Hardin .....	14,643	294,937	15,519	17,113	15,525	14,039
Harrison .....	13,931	273,312	4,323	14,336	14,214	12,631
Henry .....	8,374	203,334	8,364	8,733	8,309	8,021
Howard .....	13,636	233,339	12,633	13,051	13,031	11,636

TABLE No. 4—CONTINUED.

Counties.	Number.	Value.	Number.			
	1904.	1904.	1908.	1902.	1901.	1900.
Humboldt .....	10,816	\$ 212,810	10,096	11,061	11,206	10,868
Ia .....	8,593	205,841	8,940	9,473	9,806	8,165
Iowa .....	16,815	400,244	16,986	17,175	17,862	15,457
Jackson .....	17,180	427,165	16,694	16,769	16,870	15,687
Jasper .....	17,889	452,088	18,089	18,863	17,974	16,201
Jefferson .....	9,170	221,718	9,110	9,065	9,806	8,228
Johnson .....	17,173	439,206	7,898	17,549	17,897	17,430
Jones .....	18,623	459,904	17,787	18,175	19,045	18,444
Keokuk .....	18,907	327,281	14,279	14,923	14,808	18,840
Kossuth .....	20,415	406,815	21,220	22,912	21,497	19,846
Lea .....	11,624	291,649	11,118	10,898	10,626	10,570
Linn .....	21,208	522,474	21,212	22,071	20,683	20,646
Louis .....	7,198	186,980	7,845	7,075	7,266	6,701
Lucas .....	9,911	206,586	10,138	10,237	9,837	9,238
Lyon .....	10,640	236,554	10,794	10,869	9,231	8,289
Madison .....	18,088	290,606	18,768	15,888	14,095	13,800
Mahaska .....	18,650	292,980	18,676	18,919	18,755	12,840
Marion .....	12,500	314,816	15,068	18,226	12,697	11,225
Marshall .....	15,804	339,044	15,691	16,496	16,567	14,167
Mills .....	9,301	222,488	9,255	9,808	9,069	8,568
Mitchell .....	11,777	237,831	11,664	12,008	11,744	11,196
Monona .....	11,097	222,580	11,651	12,325	11,573	11,757
Monroe .....	9,382	244,044	9,037	8,981	9,163	8,222
Montgomery .....	10,680	214,584	10,644	10,853	10,403	9,907
Muscataine .....	10,273	296,686	10,223	9,193	11,040	10,104
O'Brien .....	12,971	235,070	17,723	12,895	12,356	11,023
Oceola .....	7,168	148,490	7,143	7,118	6,485	6,881
Pago .....	14,048	342,627	13,661	14,097	11,875	12,756
Palo Alto .....	13,008	250,062	13,773	14,784	14,569	14,805
Plymouth .....	13,046	365,080	17,863	16,843	16,299	14,598
Pocahontas .....	12,854	247,845	13,498	14,088	14,191	12,790
Polk .....	16,005	367,351	15,832	15,492	14,815	13,616
Pottawatomie .....	22,479	539,496	21,933	22,356	21,378	18,886
Poweshiek .....	15,649	380,180	15,973	16,220	15,327	14,796
Ringgold .....	12,448	277,795	12,625	13,832	12,726	12,511
Sao .....	15,297	332,661	15,615	16,546	15,472	14,658
Scott .....	14,674	405,301	14,717	14,899	14,998	14,204
Shelby .....	17,694	363,215	16,674	17,980	17,117	15,195
Sioux .....	17,832	375,108	16,889	16,187	14,868	13,409
Story .....	14,506	296,823	15,082	16,017	15,112	14,544
Tama .....	13,089	422,071	13,461	13,096	17,974	17,023
Taylor .....	18,290	273,445	18,777	12,321	13,453	11,893
Union .....	17,114	247,804	12,024	13,735	11,590	11,544
Van Buren .....	9,772	240,507	9,184	9,247	9,069	8,673
Wapello .....	9,796	219,186	9,672	9,577	9,608	8,925
Warren .....	13,542	335,052	14,888	15,106	14,084	13,022
Washington .....	12,230	281,219	12,331	11,297	12,972	12,620
Wayne .....	13,449	296,419	13,418	14,064	14,459	13,173
Webster .....	15,278	331,165	16,156	16,135	15,438	14,928
Winnebago .....	11,072	177,491	11,519	11,769	10,460	9,568
Winnebake .....	19,397	465,340	13,618	13,864	19,088	17,809
Woodbury .....	14,739	296,237	15,073	16,139	16,106	13,895
Worth .....	11,124	224,040	11,885	11,980	11,680	11,895
Wright .....	12,480	247,420	12,896	13,796	13,749	12,191
The State .....	1,873,490	\$30,675,501	1,870,062	1,423,843	1,332,243	1,236,900

Average value of cows, \$22.33.

The ancessors classify as follows: Heifers one year old, 502,573, average value, \$12.46.  
 Heifers two years old, 324,470, average value, \$17.44. Cows, 1,373,496.

## CREAMERY LIST.

List of Creameries in the State, Alphabetically Arranged According to Counties and Towns near which Creameries are Located, Together with Information Pertaining to Each.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Gathered cream.	Method of separating milk.
<i>Adair County</i>								
1	Adair .....	Adair Co-op. Creamery Co.	Co-op.	W. F. Mason, Secretary	Adair .....	C. E. McIntire ..	Separator	Test.
2	Arbor Hill .....	Arbor Hill Co-op. Creamery Co.	Co-op.	C. C. Pease, Sec. & Mgr	Stuart .....	R. J. Erb .....	S & J O.	Test.
3	Fontanelle .....	Blue Grass Creamery .....	Indiv.	A. L. Stewart & Co.	Fontanelle .....	L. B. Stewart ..	Separator	Test.
4	Osby .....	Blue Grass Creamery (s) ..	Indiv.	A. L. Stewart & Co.	Fontanelle .....	.....	Separator	Test.
5	Flak .....	Blue Grass Creamery (s) ..	Indiv.	A. L. Stewart & Co.	Fontanelle .....	.....	Separator	Test.
6	Prussia .....	Blue Grass Creamery (s) ..	Indiv.	A. L. Stewart & Co.	Fontanelle .....	.....	Separator	Test.
7	Greenfield .....	Greenfield Creamery company.	Stock	Jas. F. Land, Secretary	Greenfield .....	F. L. Odell .....	Separator	Test.
8	Greenfield .....	Howe Co-op. Creamery Co.	Co-op.	A. M. F. Landen, Secretary	Stuart .....	M. N. Bates .....	Separator	Test.
9	Stuart .....	Blue Grass Creamery .....	Indiv.	A. L. Stewart & Co.	Fontanelle .....	M. N. Bates .....	Separator	Test.
10	Bridgewater .....	Blue Grass Creamery .....	Indiv.	A. L. Stewart & Co.	Fontanelle .....	D. F. Hammers ..	Separator	Test.
11	Hebron .....	Hebron Creamery .....	Indiv.	D. F. Hammers, Proprietor	Hebron .....	.....	C. & G. O.	Test.
<i>Adams County</i>								
12	Prescott .....	Prescott Butter & Cheese Ass'n	Co-op.	G. W. Iden, Secretary	Prescott .....	F. Beal .....	Separator	Test.
13	Carl .....	Prescott Butter & Ch. Ass'n (s)	Co-op.	G. W. Iden, Secretary	Prescott .....	.....	Separator	Test.
14	Williamson .....	Prescott Butter & Ch. Ass'n (s)	Co-op.	G. W. Iden, Secretary	Prescott .....	.....	Separator	Test.
15	Williamson .....	Nebraska & Iowa Crm. Co. (s)	Indiv.	John J. King .....	Omaha, Neb.	.....	Separator	Test.
16	Mount Etna .....	Nebraska & Iowa Crm. Co. (s)	Co-op.	.....	.....	.....	Separator	Test.
17	Nevinsville .....	.....	Co-op.	.....	.....	.....	Separator	Test.
<i>Allamakee County</i>								
18	Dorchester .....	Little Daisy Creamery .....	Indiv.	Ben. W. Schulte .....	Dorchester .....	Ben. W. Schulte ..	Hand Sep	Oil test.
19	Lansing .....	Calthoun Creamery Co.	Co-op.	David Hector, Secretary	Church .....	E. V. Ferris .....	Hand Sep	Oil test.
20	Postville .....	Postville Far. Co-op. Crm. Co.	Co-op.	F. H. Walzel, Sec. & Mgr.	Postville .....	James A. Gordon ..	Hand Sep	Oil test.
21	Waterville .....	Farmers' Co-op. Crm. & Com. Co.	Co-op.	Peter Arneson, Secretary	Waterville .....	F. W. Hessel .....	Gath Or.	Oil test.
22	Ladlow .....	Ladlow Co-op. Creamery Co.	Co-op.	F. A. Sanderman, Sec.	Waukon .....	W. P. Muth .....	Separator	Oil test.
23	Quandahl .....	Aretic Spring Creamery .....	Indiv.	I. D. Johnson, Proprietor	Quandahl .....	I. O. Langlie .....	Gath Or.	Oil test.
24	Waukon .....	Far. Waukon Co-op. Crm. Co.	Co-op.	Peter Bieber, Secretary	Waukon .....	Jackson Smith .....	Gath Or.	Oil test.

## Audubon County—

26	Audubon .....	Sharon Creamery .....	Co-op.	C. C. Moller, Secretary .....	Audubon, R. 4 .....	M. Anderson .....	S. & G. C. Separator .....	Test.
27	Brayton .....	Oakfield Twp. Sep. Crm. Co. .....	Co-op.	Hans Nymand, Secretary .....	Brayton, R. 1 .....	J. P. Nielson .....	S. & G. C. Separator .....	Test.
28	Extra .....	Audubon Twp. Sep. Crm. Co. .....	Co-op.	P. Jensen, Secretary .....	Extra .....	P. Jensen .....	S. & G. C. Separator .....	Test.
29	Extra .....	West Hamlin Co-op. Crm. Co. .....	Co-op.	C. W. Boyson, Secretary .....	Extra, R. 2 .....	Peter Sorensen .....	S. & G. C. Separator .....	Test.
30	Extra .....	Extra Creamery company .....	Co-op.	Chris C. Nelson, Secretary .....	Extra .....	Chr. C. Nelson .....	S. & G. C. Separator .....	Test.
31	Hamlin .....	Blue Gra-s Sep. Creamery Co. .....	Co-op.	C. V. Christensen, Sec. ....	Hamlin .....	F. Heleman .....	S. & G. C. Separator .....	Test.
32	Kimbarton .....	Blue Sep. Creamery Co. ....	Co-op.	Peter Lukke .....	Audubon, R. 4 .....	C. Thomsen .....	S. & G. C. Separator .....	Test.
33	Ross .....	Ross Creamery com any .....	Co-op.	H. W. Stearns, Secretary .....	Audubon .....	B. Jensen .....	Hand Sep .....	Test.
34	Manning .....	Liberty Creamery company .....	Co-op.	George Nelson, Secretary .....	Irvin .....	Oscar Jensen .....	Hand Sep .....	Test.

## Benton County—

35	Blairtown .....	Blairtown Creamery .....	Indiv.	Charles Harbold .....	Blairtown .....	Chas. Harbold .....	Hand Sep .....	Test.
36	Vinton .....	The Vinton Creamery .....	Indiv.	A. M. Rowe, Sec. & Mgr .....	Vinton .....	Clarence W. Howe .....	S. & G. C. Separator .....	Test.
37	Norway .....	Norway Creamery .....	Indiv.	M. R. Hervey, Proprietor .....	Norway .....	M. R. Hervey .....	Crash Ur .....	Test.
38	Van Horne .....	Van Horne Creamery .....	Indiv.	H. O. Dauchy, Proprietor .....	Van Horne .....	H. O. Dauchy .....	Separator .....	Test.

## Black Hawk County—

39	La Porte City .....	La Porte Creamery company .....	Co-op.	O. B. Ghrirlich, Secretary .....	La Porte City .....	George E. Jensen .....	S. & G. C. Separator .....	Test.
40	Wasson .....	The Palmer-Hubbard company .....	Stock	C. V. Rosenburger, Sec .....	Independence .....	G. O. Miller .....	Hand Sep .....	Test.
41	Benson .....	Benson Dairy company .....	Co-op.	W. Bozarth, Secretary .....	Cedar Falls, R. 2 .....	G. W. Wardell .....	Separator .....	Test.
42	Grain Creek .....	Grain Creek Creamery .....	Indiv.	Wm. Meier, Proprietor .....	Grain Creek .....	Wm. Meier .....	Separator .....	Test.
43	Dewar .....	Great Western Creamery .....	Indiv.	Wm. Widdell, Proprietor .....	Dewar .....	J. Tegelmeyer .....	Separator .....	Test.
44	Dunkerton .....	Farmers' Creamery company .....	Co-op.	G. S. Kleckner, Secretary .....	Dunkerton .....	H. G. Alexander .....	Separator .....	Test.
45	Eagle Center .....	Eagle Center Dairy Ass'n .....	Co-op.	D. G. Lichty, Secretary .....	Waterloo R. 1 .....	H. O. Kancke .....	Separator .....	Test.
46	Fairbank .....	East Lester Creamery Co. ....	Co-op.	Ira Finch, Secretary .....	Fairbank .....	C. E. Brandt .....	Separator .....	Test.
47	Finchford .....	Union Creamery company .....	Co-op.	O. A. George, Secretary .....	Winlow .....	I. R. Moon .....	Separator .....	Test.
48	Hudson .....	Hudson Co-op. Dairy Ass'n .....	Co-op.	H. E. Rindley, Secretary .....	Hudson .....	Wm. Hammel .....	Separator .....	Test.
49	Cedar Falls .....	Mt. Vernon Creamery .....	Co-op.	F. J. Orth, Secretary .....	Jamestown .....	A. J. Freeman .....	Separator .....	Test.
50	Jubilee .....	Jubilee Co-op. Creamery Co. ....	Co-op.	E. Stevens, Secretary .....	Raymond R. 1 .....	Byron Linius .....	Separator .....	Test.
51	Voorhes .....	Red Bird Creamery .....	Co-op.	J. B. Kasech, Secretary .....	Voorhes .....	Peter Peterson .....	Separator .....	Test.
52	Gilbertville .....	Gilbertville Dairy Association .....	Co-op.	H. O. Kasch, Secretary .....	Gilbertville .....	M. Enevoldsen .....	Separator .....	Test.
53	Waterloo .....	Edwards Creamery .....	Indiv.	J. H. O. Meckdorf, Proprietor .....	Waterloo .....	H. O. Meckdorf .....	Separator .....	Test.
54	Waterloo .....	Farmers Dairy Association .....	Co-op.	U. S. Blough, Secretary .....	Waterloo .....	R. W. Chadwick .....	Separator .....	Test.

## Boone County—

55	Boone .....	Dodge Far Mut. Co-op. Crm. Co. .....	Co-op.	J. Rihbert, Secretary .....	Boone R. 5 .....	August Drueker .....	Separator .....	Test.
56	Rosedale .....	Rosedale Co-op. Creamery Co. ....	Co-op.	M. P. Peterson, Secretary .....	Story City .....	L. O. Peterson .....	Separator .....	Test.
57	Bouon .....	Woodward Creamery (s) .....	Indiv.	H. P. Caloney .....	Woodward .....	A. B. Caloney .....	S. & G. O. Separator .....	Test.

## Bremer County—

58	Bremer .....	Bremer Creamery company .....	Co-op.	F. C. Kohagen, Secretary .....	Waverly, R. 2 .....	Wm. Kallenbach .....	Separator .....	Test.
59	Bremer .....	Western Douglas Creamery .....	Co-op.	Aug. Hoppeworth, Sec. ....	Tripoli, R. 1 .....	A. F. Sadler .....	Separator .....	Test.
60	Sumner .....	Little Valley Creamery Co. ....	Co-op.	Fred Seehase, Secretary .....	Sumner, R. 7 .....	H. O. Ladage .....	Separator .....	Test.
61	Denver .....	The Farrington Creamery Co. ....	Co-op.	Fred Garton, Secretary .....	Cedar Falls .....	B. O. Squires .....	Separator .....	Test.

## CREAMERY LIST—CONTINUED.

Office record number	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Gathered cream.	Method of receiving.
61	Denver.	First Maxfield Creamery Co.	Co-op.	Wm. Millus, Secretary.	Denver.	John Wedemeyer	Separator	Hund.
62	Frederika.	Frederika Creamery company.	Co-op.	J. H. McDonald, Secretary	Frederika	Cecil E. Carr	Separator	Test.
63	Klinger.	Klinger Creamery	Indiv.	C. H. Mohrssen, Proprietor	Klinger	C. H. Welling	Separator	Hund.
64	Kuttel.	Maxfield Creamery company	Co-op.	John Strotman, Secretary.	Kuttel.	Richard Becker	Separator	Hund.
65	Sumner.	Climax Creamery company	Co-op.	Henry S. Acht, Secretary.	Sumner, R. 6	C. L. Mills	Separator	Test.
66	Sumner.	Excelsior Creamery company	Co-op.	H. E. Wuttke, Secretary.	Sumner.	Robert Masille.	Separator	Hund.
67	Sumner.	Sumner Creamery company	Co-op.	John Dawson, Secretary.	Sumner.	Henry Hankner.	Separator	Test.
68	Tripoli.	Potters Siding Creamery Co.	Stock	H. F. Braun, Secretary.	Tripoli, R. 2	W. Ambros	Separator	Hund.
69	Tripoli.	Artisan Creamery company	Co-op.	C. Jahnke, Secretary.	Tripoli, R. 2	F. C. Oitrogge	Separator	Hund.
70	Denver.	LaFayette Creamery company	Co-op.	H. Graening, Secretary.	Tripoli, R. 1	E. H. Homan	Separator	Test.
71	Waverly.	Washington Creamery Co.	Co-op.	Emil Walther, Secretary.	Waverly, R. 5.	Henry Piegors	Separator	Test.
72	Waverly.	Siegel Creamery company	Co-op.	S. M. Lehman, Secretary.	Tripoli, R. 1.	A. Bottermann	Separator	Test.
73	Tripoli.	Grove Hill Creamery company	Stock	H. J. Joens, Secretary.	Waverly	Wm. Lennius	Separator	Test.
74	Waverly.	Waverly Cond. & Caramel Co.	Co-op.	Guy Van Devere, Secretary	Grove Hill	C. E. Patchin	Separator	Test.
75	Fairbank	Spring Fountain Creamery Co.	Co-op.	J. H. Kane, Secretary	Sumner	Frank Daniels	Separator	Hund.
76	Sumner		Co-op.	Joe Volker, Secretary		Fred Sommer	Separator	Hund.
<i>Buchanan County—</i>								
78	Aurora	Aurora Creamery	Indiv.	Geo. Weeks, Proprietor	Aurora.	C. R. Fichtelner	Separator	Test.
79	Brandon.	Fairbank Farmers Creamery Co.	Co-op.	W. W. Bain, Secretary	Brandon	M. E. Benson	Separator	Test.
80	Fairbank	Hazleton Farmers Creamery Co.	Co-op.	L. Gerstenberger, Sec	Fairbank	H. E. Opperman	Separator	Test.
81	Hazleton.	The Palmer-Hubbard company	Stock	C. V. Rosenberger, Sec	Hazleton.	E. M. Vargason	Separator	Test.
82	Independence	The Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec	Independence	D. H. Macomber	S. & G. C.	Test.
83	Rowley	Jesup Creamery company	Stock	C. L. Bright, Secretary	Independence	S. & G. C.	S. & G. C.	Test.
84	Jesup	Lamont Creamery company	Co-op.	H. A. Von, Secretary	Jesup	A. Christensen.	Separator	Test.
85	Lamont	Otterville Creamery company	Co-op.	I. S. Hutton, Secretary	Lamont	L. S. Edwards	Separator	Test.
86	Otterville	Stanley Creamery	Indiv.	Geo. Weeks, Proprietor	Independence	I. S. Hutton	Separator	Test.
87	Winthrop	The Palmer-Hubbard company.	Stock	C. V. Rosenberger, Sec	Aurora	Arthur Strong	Separator	Test.
88	Winthrop	The Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec	Independence	W. H. Plank	S. & G. C.	Test.
89	Queanonton	The Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec	Independence	S. & G. C.	S. & G. C.	Test.
90	Middlefield	The Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec	Independence	S. & G. C.	S. & G. C.	Test.
91	Newtownville	The Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec	Independence	S. & G. C.	S. & G. C.	Test.



## CREAMERY LIST—CONTINUED.

Office record number	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Gathered cream.	Method of receiving milk.
<i>Cass County—</i>								
180	Cumberland .....	Farmers Mutual Crm. company	Co-op.	P. Pettinger, Secretary	Cumberland .....	Albert Hryn .....	S. & G. C. Separator	Test.
181	Griswold .....	Lyman Co-op. Mut. Crm. Co.	Co-op.	W. C. Mueller .....	Griswold .....	W. B. Carol .....	Separator	Test.
182	Atlantic .....	Farmers Creamery company ..	Co-op.	.....	.....	.....	.....	.....
<i>Cedar County—</i>								
183	Bennett .....	Golden Star Creamery .....	Indiv.	W. H. Kroeger, Proprietor	Bennett .....	W. H. Kroeger .....	Separator	Test.
184	Clarence .....	Union Creamery .....	Indiv.	E. Huxoll, Proprietor	Clarence .....	E. Huxoll .....	Separator	Hand.
185	Clarence .....	Clarence Creamery .....	Indiv.	Henry Stuck, Proprietor	Clarence .....	Henry Struck .....	Gath. Cr.	Oil test.
186	Durant .....	Durant B. & C. Association ..	Stock.	M. O. Bobstedt, Secretary	Durant .....	E. A. Kinler .....	Gath. Cr.	Test.
187	Lowden .....	Home Creamery .....	Indiv.	G. F. Reinking, Proprietor	Lowden .....	Geo. Reinking .....	Gath. Cr.	Oil test.
188	Lowden .....	Yankee Run Creamery .....	Indiv.	Chas. O. Boettger, Proprietor	Lowden .....	Chas. O. Boettger .....	Separ. or	Test.
189	Lowden .....	Union Creamery (s) .....	Indiv.	E. Huxoll, Proprietor	Clarence .....	L. Elliott .....	Separator	Hand.
190	West Branch .....	West Branch Creamery .....	Indiv.	Eyes & Elliott, Proprietors	West Branch .....	.....	S. & G. C.	Test.
140	Springdale .....	West Branch Creamery (s) .....	Indiv.	Eyes & Elliott, Proprietors	West Branch .....	.....	S. & G. C.	Test.
141	Springdale .....	.....	.....	.....	.....	.....	.....	.....
<i>Cerro Gordo County—</i>								
142	Mason City .....	J. D. Bickel Produce company.	Indiv.	M. V. Bickel, Secretary	Mason City .....	Nicholas Fisher .....	Gath. Cr.	Test.
143	Plymouth .....	Plymouth Creamery company ..	Co-op.	C. A. Molberry, Secretary	Plymouth .....	.....	Separator	Test.
144	Portland .....	Portland Creamery .....	Indiv.	C. E. Sweet, Proprietor	Portland .....	C. E. Sweet .....	Gath. Cr.	Test.
145	Rockwell .....	Rockwell Creamery .....	Indiv.	G. H. Gurler, Proprietor	DeKalb, Ill .....	Charles Logan .....	Gath. Cr.	Test.
146	Thornton .....	Thornton Creamery .....	Indiv.	G. W. Kennedy, Proprietor	Thornton .....	Chris. Mortensen .....	Gath. Cr.	Test.
147	Mcnervey .....	Mcnervey Creamery .....	Indiv.	W. J. Kernan, Proprietor	Mcnervey .....	M. J. Kernan .....	Gath. Cr.	Test.
148	Ventura .....	Fertile Co-operative Dairy Co(s)	Co-op.	J. T. Tallackson .....	Fertile .....	.....	Separator	Test.
<i>Cherokee County—</i>								
149	Aurelia .....	Aurelia Creamery .....	Indiv.	McAdam & Todson & Co ..	Elgin, Ill .....	Alex. McAdam .....	Hand Sep.	Test.
150	Larrabee .....	Larrabee Creamery .....	Indiv.	A. Younger, Proprietor	Larrabee .....	A. Younger .....	Hand Sep.	Test.
151	Marcus .....	White Rose Creamery .....	Indiv.	C. E. Austin, Proprietor	Marcus .....	E. F. Jellan .....	S. & G. C.	Test.
152	Washta .....	Washta Creamery .....	Indiv.	James Robertson, Jr., Sec.	Washta .....	E. I. Boper .....	Gath. Cr.	Test.

## Chickasaw County—

183	Boyd	Boyd Creamery Association...	Co-op	Wm. Denner, Secretary	Boyd	J. M. Zabrud	Separator	Test.
184	Alta Vista	Alta Vista Farmer's Orn. Assn.	Co-op	J. Westenberger, Secretary	Alta Vista	Mr. Buhner	Separator	Test.
185	Devon	Devon Farmer's Creamery	Co-op	Alfred Larso	Devon	Mr. Opper	Separator	Test.
186	Deerfield	Deerfield Creamery Co.	Co-op	J. W. Kane, Secretary	Deerfield	F. W. Sargent	Separator	Test.
187	Fredericksburg	Fredericksburg Butter Factory	Co-op	C. L. Whitcomb, Secretary	Fredericksburg	H. E. Forrester	Separator	Test.
188	Ionis	Ionis Farmer's Creamery Assn.	Co-op	W. M. Hall, Secretary	Ionis	R. S. Cagley	Gath. Or.	Oil Test
189	Jerico	Jerico Creamery Association	Co-op	L. R. Williams, Secretary	Jerico	John Finnigan	Separator	Test.
190	Lawler	Lawler Creamery Association	Co-op	H. B. Kout, Secretary	Lawler	Allen Gulbranson	Separator	Test.
191	Little Turkey	Little Turkey Creamery	St.-ck	H. B. Carpenter, Sec.	Elkader	S. & G. C.	S. & G. C.	Test.
192	New Hampton	New Hampton Creamery	Indiv	J. L. Humphrey, Jr.	N Bedford, Mass.	S. & G. C.	S. & G. C.	Test.
193	New Hampton	New Hampton Creamery (s)	Indiv	J. L. Humphrey, Jr.	N Bedford, Mass.	S. & G. C.	S. & G. C.	Test.
194	Na-hua	Na-hua Co-op Creamery Assn.	Indiv	E. V. L. Hall, President	Na-hua	J. W. Cagley	Gath. Or.	Oil Test
195	Na-hua	Charles Gurlier & Company	Indiv	Chas. Gurlier & Company	Dekalb, Ill.	W. H. Miller	Gath. Or.	Oil Test
196	N Washington	North Washington Cream. Co	Co-op	F. N. Gindorf, Secretary	N Washington	Fred Schreiber	Gath. Or.	Oil Test
197	Republc	Republc Creamery (s)	Indiv	Charles Gurlier & Co.	Dekalb, Ill.	G. F. Langquist	Gath. Or.	Oil Test
198	Seute	Seute Co-op Creamery Assn	Co-op	Wm. Sanderson, Sec.	La Jor, R. 2	Sam Binn	Separator	Test.
199	Williamstown	Williamstown Creamery	Co-op	H. B. Kersson, Secretary	Fredericksburg		Separator	Test.

## Clay County—

171	Dickens	Farmers Creamery company	Co-op	Wm. McCurdy, Secretary	Dickens	A. L. Remington	Separator	Test.
172	Forstoria	Forstoria Creamery company	St.-ck	B. D. Dunning	Forstoria	R. Riley	S. & G. C.	Test.
173	Royal	Royal Creamery company	Indiv	Prof. G. L. McKay	Ames	R. R. Churchill	S. & G. C.	Test.
174	Langton	Farmers Co-op Creamery	Co-op	H. B. B.-ck, Secretary	Langton	Charles Johnson	Separator	Test.
175	Spencer	Spencer Creamery	Indiv	J. W. Corry, Proprietor	Spencer	Frank L. Repae	S. & G. C.	Test.
176	Webb	Webb Creamery company	Indiv	J. A. Redd, Proprietor	Webb	J. A. Redd	Hand Sep	Test.

## Clayton County—

177	Elkader	Highland Far. Creamery Assn.	Co-op	G. Gregerson	Elgin	H. L. Michaelson	S. & G. C.	Oil test.
178	Elkader	Elkader Creamery	Stock	H. R. Carpenter	Elkader	Harvey Olough	Hand Sep	Test.
179	Edgewood	Edgewood Creamery	Indiv	H. F. Beyer	Edgewood	Ed Whipple	S. & G. C.	Test.
180	Elkport	Elkport Creamery (s)	Indiv	H. F. Beyer	St. Olaf R. 1		S. & G. C.	Test.
181	Farmerburg	Farmers Co-op Creamery Co	Co-op	John Johnson, Secretary	O Schmuescher	I. Henderschoth	Hand Sep	Test.
182	Garnaville	Garnaville Far. Co-op Orn.	Co-op	John Hanson	Garnaville	O Schmuescher	Gath Or	Test.
183	Launa	Launa Far. Co-op Orn. Co.	Co-op	John H. Hanson	Launa	James A. Barker	S. & G. C.	Test.
184	Littleport	Littleport Creamery	Indiv	H. F. Beyer	Edgewood	Don Whipple	S. & G. C.	Test.
185	Monona	Monona Creamery	Stock	H. R. Carpenter	Elkader	Peter Klink	S. & G. C.	Test.
186	Monona	Monona Creamery	Stock	H. R. Carpenter	Elkader	G. M. Miller	Hand Sep	Test.
187	Osterdock	Osterdock Creamery	Stock	H. R. Carpenter	Elkader	A. H. Peacock	Separator	Test.
188	Mederville	Mederville Creamery	Indiv	Wm. Brinkhaus	Mederville	Wm. Brinkhaus	S. & G. C.	Test.
189	McGregor	J. D. Bickel Produce company	Stock	M. V. Bickel	McGregor	Geo. Hedron	Hand Sep	Test.
190	Strawberry P	Strawberry Pt. Far. Orn. Assn	Co-op	O. Q. Gladwin, Secretary	Strawberry Pk.	H. J. Evans	Separator	Test.
191	St. Olaf	St. Olaf Farmers Creamery Co.	Co-op	G. R. Englehardt	St. Olaf R. 1	J. Frisby	Gath. Or.	Test.
192	Volga City	Farmers Co-op Creamery Co.	Co-op	Wm. Leal, Secretary	Volga City	Joe Jones	S. & G. C.	Test.
193	Watson	Blue Grass Creamery	Co-op	John Geraghty, Secretary	McGregor	F. A. Fiele	Hand Sep	Test.
194	Gunder	Clermont Valley Orn. Co. (s)	Co-op	F. F. Ferguson, Secretary	Clermont		Separator	Test.

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Galleter used.	Method of re-ceiving milk.
185	East Elport.	Dubuque Butter & Milk Co. (s)	Stock.	G. C. Hopkins, Secretary.	Oregon, Ill.	.....	Hand Sep	Test.
186	Guttenburg	Dubuque Butter & Milk Co. (s)	Stock.	G. C. Hopkins, Secretary.	Oregon, Ill.	.....	Hand Sep	Test.
<i>Clinton County</i>								
187	Delmar	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	L. J. Spohn	S. & G. C.	Test.
188	Elwood	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	Frank Leinbaugh	S. & G. C.	Test.
189	Lost Nation	Farmers Creamery	Co-op.	Hidden Kammer, Secretary	Lost Nation	Grant Adamson	S. & G. C.	Test.
200	Springville	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	J. G. Wheelock	S. & G. C.	Test.
201	Peters Grove	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	A. Anrex	S. & G. C.	Test.
202	Wilton	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	C. B. Berst	S. & G. C.	Test.
203	Wheatland	Farmers' Co-op. Creamery Co.	Co-op.	Emil Lohmann, Secretary	Wheatland	A. E. Banta	S. & G. C.	Test.
204	Toronto	Farmers' Co-op. Creamery Co.	Co-op.	Edward Hart, Jr.	Toronto	W. L. Sloan	Separator	Test.
205	Lost Nation	Diamond Creamery Co. (s)	Indiv.	Andrew Nimmo, Manager	Monticello	.....	S. & G. C.	Test.
206	Lost Nation	Diamond Creamery company (s)	Indiv.	Andrew Nimmo, Manager	Monticello	.....	S. & G. C.	Test.
207	Smithtown	Diamond Creamery company (s)	Indiv.	Andrew Nimmo, Manager	Monticello	.....	S. & G. C.	Test.
208	Brown	Springbrook Creamery (s)	Indiv.	John Newman Company	Elgin, Ill.	.....	S. & G. C.	Test.
<i>Crawford County</i>								
209	Charter Oak	Charter Oak Creamery	Indiv.	John O. Keller, Proprietor.	Charter Oak	Will Craft	Hand Sep	Test.
210	Unionson	Fairmont Creamery company	Stock.	E. T. Rector, Manager	Fairmount, Neb	A. F. Durkee	Hand Sep	Test.
<i>Dallas County</i>								
211	Dexter	Farmers' Co-op. Creamery Ass'n	Co-op.	James L. Keachie, Sec.	Dexter	Jas. L. Keachie	S. & G. C.	Test.
212	Berry	J. Moody & Son's Creamery	Indiv.	J. Moody & Son	Berry	C. Simpson	S. & G. C.	Test.
213	Woodward	Woodward Creamery	Indiv.	H. P. Caloney, Proprietor	Woodward	A. B. Caloney	S. & G. C.	Test.
214	Dallas Center	Beatrice Creamery company (s)	Stock.	.....	.....	.....	Hand Sep	Test.
215	Min. turn	Beatrice Creamery company (s)	Stock.	.....	.....	.....	Hand Sep	Test.
216	Vanhook	Beatrice Creamery company (s)	Stock.	.....	.....	.....	Hand Sep	Test.
217	Vanhook	Beatrice Creamery company (s)	Stock.	.....	.....	.....	Hand Sep	Test.
218	Redfield	Smith Produce company	Stock.	.....	.....	.....	Separator	Test.
219	Blough	Iowa Dairy company (s)	Stock.	W. E. Hall, Manager	Yale	.....	Separator	Test.



## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or cream gathered.	Method of re-ceiving milk.
<i>Dubuque County—</i>								
260	Balltown .....	Balltown Co-op. Creamery Co.	Co-op.	C. D. Herrington, Sec.	Specht's Ferry R. 9	Henry Koehler..	S. & G. O.	Test.
261	Cascade .....	Spring Valley Co-op. Crm. Co.	Co-op.	J. N. Kremer, Sec.	Farley, R. 16	Wm. Thompson..	Separator	Test.
262	Cascade .....	Cascade Co-op. Creamery Co.	Co-op.	P. J. Conlin, Sec.	Cascade .....	C. T. Elliott...	Separator	Test.
263	Dyersville .....	Hickory Valley Creamery .....	Co-op.	John Ramm, Sec.	Farley, R. 17	Frank Ruby...	Separator	Test.
264	Dyersville .....	Farmers' Golden Star Crm. Co.	Stock.	F. P. Kern, Sec.	Dyersville .....	John B. Feldman	Separator	Test.
265	Epworth .....	Epworth Co-op. Creamery Co.	Co-op.	J. D. Burrell, Sec.	Epworth .....	E. L. Beers .....	Separator	Test.
266	Fillmore .....	Fillmore Co-op. Creamery .....	Co-op.	Wm. Craft, Sec.	Fillmore .....	John G. Stemmer	Separator	Test.
267	Farley .....	Johns Creek Creamery .....	Indiv.	A. K. Heald & Son .....	Farley .....	Robert Parrott..	S. & G. O.	Test.
268	Farley .....	Farley Creamery Co. ....	Co-op.	G. W. Cropp, Sec.	Farley .....	Thomas Landis	S. & G. O.	Test.
269	Onell .....	Oak Grove Creamery .....	Co-op.	Jonathan Paisley, Sec.	Wanpafon, R. 30	Harry Switzer..	Separator	Test.
270	Lac hera .....	Lattin's Spring Creamery Co.	Indiv.	Joe C. Breitbach, Sec.	Epworth .....	Peter Joellinger	Separator	Test.
271	Luxemburg .....	Globe Creamery Co. ....	Stock.	Bernard Herbers, Sec.	N. Buena Vista	George Landis..	Separator	Test.
272	New Vienna .....	New Vienna Central Creamery	Stock.	John Fisher, Sec.	Durango, R. 35	Peter N. Schmitt	Separator	Test.
273	Richardsville .....	Farm Creamery Co. ....	Co-op.	Nic Semmott, Sec.	Dubuque, R. 1	Nic Semmott .....	Separator	Test.
274	Sherrill .....	Silverdale Creamery .....	Co-op.	J. J. Boley, Sec.	Specht's Ferry	Joe Stillmunkes	S. & G. O.	Test.
275	Sherrill .....	Sherrill Creamery Co. ....	Indiv.	C. Baehler, Prop.	Worthington	C. Baehler .....	Separator	Test.
276	Worthington .....	Otter Creek Creamery .....	Indiv.	Geo. Lable, Prop.	Zwingle .....	John Farrel .....	Separator	Test.
277	Worthington .....	Holy Cross Creamery (s) ..	Co-op.	Geo. Sweeney, Sec.	N. Buena Vista	P. N. Jan .....	Hand Sep.	Test.
278	Boly Cross .....	Holy Cross Creamery Co.	Indiv.	B. P. Widley & Son .....	Dubuque .....	Geo. Werner .....	S. & G. O.	Test.
279	Dubuque .....	Columbian Creamery .....	Indiv.	Blonde Bros. ....	Dubuque .....	J. C. Oyle .....	Hand Sep	Test.
280	Dubuque .....	Dubuque Butter & Milk Co.	Stock.	G. C. Hopfma, Sec.	Oregon, Ill.			
<i>Emmet County</i>								
281	Armstrong .....	Farmers' Co-op. Creamery ..	Co-op.	Peter H. Burt, Secretary	Armstrong .....	Henry Kronholm	S. & G. O.	Test.
282	Armstrong .....	Eatherville Creamery Co.	Stock.	J. A. Kronholm .....	Eatherville .....	A. H. Pangen .....	S. & G. O.	Test.
283	Emmetburg .....	Farmers' Creamery Co.	Stock.	L. A. Gaarde, Secretary	Halfa .....	C. M. Vols .....	Separator	Test.
284	Emmetburg .....	Huntington Co-op. Crm. Co.	Co-op.	L. L. Druley, Secretary	Handington .....	Geo. Graham .....	S. & G. O.	Test.
285	Hopk .....	Hopk Farmers' Crm. Co.	Co-op.	John A. Rosold, Secretary	Hopk .....	Julius Jensen .....	S. & G. O.	Test.
286	Hopk .....	Denmark Creamery Co.	Co-op.	John J. Fink, Secretary	Ringsied .....	Peter Kousden .....	Separator	Test.
287	Hopk .....	Denmark Creamery .....	Co-op.	H. J. Gaarde, Secretary	Ringsied .....	Ed. Kousden .....	Separator	Test.
288	Ringsied .....	Forty's Creamery .....	Co-op.	H. J. Gaarde, Secretary	Armstrong .....	J. C. Jensen .....	S. & G. O.	Test.
289	Wallingford .....	Wallingford Creamery Co.	Stock.	C. O. Anderson, Secretary	Wallingford .....			



## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of re-ceiving milk.
<i>Grundy County—</i>								
884	Aplington .....	Buck Grove Creamery Co. ....	Co-op.	O. Nelhaus .....	Aplington .....	W. I. Dillingen ..	S. & G. O.	Test.
885	Ackley .....	Johnson Creamery .....	Indiv.	Martin & Johnson .....	Ackley .....	Henry Schmitzer ..	Separator	Test.
886	Dike .....	Dike Co-operative Creamery Co. ....	Co-op.	E. B. Roush .....	Dike .....	A. Kindberg .....	, & G. O.	Test.
887	Fredaaville .....	Fredaaville Co-operative Co. ....	Co-op.	Hans Lauson .....	Cedar Fall, R. 3. ....	Soren Jorgenson ..	Separator	Test.
888	Stout .....	Beaver Center Creamery Co. ....	Co-op.	Jacob A. Meyer .....	Stout .....	T. E. Bilger .....	Separator	Test.
889	Wellsburg .....	Wellsburg Farmers Creamery .....	Co-op.	O. A. Murray, Secretary ..	Wellsburg .....	C. A. Murray .....	S. & G. O.	Test.
<i>Guthrie County—</i>								
890	Bayard .....	Bayard Creamery .....	Co-op.	M. J. Hallman, Secretary ..	Bayard .....	L. R. Winn .....	Gath. Cr.	Test.
891	Casey .....	Casey Creamery company .....	Co-op.	O. L. Knox, Secretary .....	Casey .....	J. H. Matvers .....	S. & G. O.	Test.
892	Guthrie Center .....	Guthrie Center Co-op. Crm. Co. ....	Co-op.	J. A. McLaughlin, Sec. ....	Guthrie Center .....	J. M. Taff .....	S. & G. O.	Test.
893	Glendon .....	Glendon Creamery company .....	Co-op.	J. C. Hanes, Secretary .....	Glendon .....	J. Girard .....	Separator	Test.
894	Menlo .....	Menlo Creamery company .....	Stock.	A. C. Curtis, Secretary .....	Stuart .....	H. H. Colbert .....	S. & G. O.	Test.
895	Panora .....	Panora Creamery .....	Indiv.	E. F. Wilcox .....	Panora .....	John Taff .....	Separator	Test.
896	Stuart .....	Stuart Co-operative Crm. Co. ....	Stock.	C. M. Cad'y, Secretary .....	Stuart .....	R. Cochran .....	S. & G. O.	Test.
897	Yale .....	Iowa Dairy company .....	Stock.	W. H. Hall, Manager .....	Yale .....	D. C. Bathlow .....	Separator	Test.
898	Dale .....	Dale Mutual Co-operative Assn ..	Co-op.	O. E. Spangler, Secretary ..	North Branch .....	J. L. Clark .....	S. & G. O.	Test.
899	North Branch .....	North Branch Co-op. Crm. Co. ....	Stock.				Separator	Test.
900	Wichita .....	Co-operative Creamery .....	Co-op.				S. & G. O.	Test.
<i>Hamilton County—</i>								
841	Blairsburg .....	Blairsburg Creamery .....	Indiv.	P. E. Saxer .....	Blairsburg .....	P. E. Saxer .....	S. & G. O.	Test.
842	Ellsworth .....	Ellsworth Co-op. Crm. Assn ..	Co-op.	S. Stenberg, Secretary .....	Ellsworth .....	M. J. Mannager ..	Separator	Test.
843	Williams .....	Ellsworth Co-op. Crm. Assn (s) ..	Co-o.	S. Stenberg, Secretary .....	Ellsworth .....		Separator	Test.
844	Radcliffe .....	Ellsworth Co-op. Crm. Assn (s) ..	Indiv.	S. Stenberg, Secretary .....	Ellsworth .....		Separator	Test.
845	Jewel Junction .....	Jewel Creamery .....	Indiv.	Gronbeck & Mordh .....	Jewel Junction .....	Chris Mordh .....	Separator	Test.
846	Jewel .....	Jewel Creamery (s) .....	Indiv.	Gronbeck & Mordh .....	Jewel Junction .....		Separator	Test.
847	Randall .....	Randall Farmers Creamery .....	Co-op.	H. N. Miller, Secretary .....	Randall .....	H. N. Miller .....	Separator	Test.
848	Stratford .....	Stratford Creamery .....	Indiv.	E. O. Rice, Proprietor .....	Stratford .....	G. F. Etumel .....	S. & G. O.	Test.
849	Stanhope .....	Stanhope Creamery company .....	Indiv.	E. O. Brewer, Proprietor .....	Stanhope .....	G. E. Jackson .....	Separator	Test.



## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or galvanized cream.	Method of receiving milk.
<i>Humboldt County—</i>								
885	Arnold.....	Grove Co-op. Creamery.....	Co-op.	Charles J. Nelson, Secretary	Arnold.....	Ira O'Neill.....	S. & G. C. Separator	Test.
886	Bradgate.....	Bradgate Co-op. Crm. company.....	Co-op.	J. L. Van Horne, Secretary	Bradgate.....	W. Evans.....	S. & G. C. Separator	Test.
887	Bode.....	Bode Creamery association.....	Co-op.	John Pederson, Secretary	Bode.....	M. H. Rawson.....	S. & G. C. Separator	Test.
888	Goldfield.....	Bowl Lake Creamery company.....	Co-op.	A. M. Clausen, Secretary	Goldfield.....	L. M. Tysor.....	S. & G. C. Separator	Test.
889	Hardy.....	Farmers Co-op. Crm. company.....	Co-op.	G. L. Clancy, Secretary	Hardy.....	E. K. Tunkins.....	S. & G. C. Separator	Test.
890	Humboldt.....	Humboldt Creamery company.....	Co-op.	A. J. Cluckshank, Secretary	Humboldt.....	L. D. Hill.....	S. & G. C. Separator	Test.
891	Olsen.....	Waucooda Creamery Assn.....	Co-op.	N. J. Clave, Secretary	Humboldt.....	L. Ver Shuren.....	S. & G. C. Separator	Test.
892	Pioneer.....	Pioneer Creamery company.....	Indiv.	W. M. Hering.....	Pioneer.....	K. Stouberg.....	S. & G. C. Separator	Test.
893	Renwick.....	Renwick Creamery company.....	Co-op.	S. S. Bartley.....	Renwick.....	C. A. Curral.....	S. & G. C. Separator	Test.
894	Rutland.....	Rutland Creamery association.....	Co-op.	Lewis Olson, Secretary.....	Rutland.....	T. M. Bo glutn.....	S. & G. C. Separator	Test.
895	Thor.....	Clover Creamery.....	Stock.		Thor.....	Ben Lanning.....	S. & G. C. Separator	Test.
<i>Ida County—</i>								
896	Arthur.....	Concklin Bros.' Creamery.....	Indiv.	M. J. Concklin, Proprietor.	Arthur.....	M. J. Concklin.....	S. & G. C. Separator	Test.
897	Holstein.....	Holstein Creamery.....	Indiv.	A. W. Hubbard, Proprietor.	Correctionville.....	Arthur R. Meen.....	Hand Sep	Test.
<i>Iowa County—</i>								
898	Conroy.....	Shimer Creamery company.....	Co-op.	S. H. Stanerson, Secretary	Conroy.....	W. H. Woodcock.....	Separator	Test.
899	Ledora.....	Genoa Bluff Creamery Co.....	Co-op.	M. W. Kilding, Secretary	Williamsburg R. 4.....	Geo. Byrne.....	S. & G. C. Separator	Test.
900	Ledora.....	Ledora Creamery company.....	Co-op.	L. W. Wilson, Secretary	Ledora.....	John Baitinger.....	S. & G. C. Separator	Test.
901	Marango.....	Marango F. M. Co-op. Cr. Assn.....	Co-op.	Dennis Sullivan, Sec.....	Marango.....	W. F. Ried.....	S. & G. C. Separator	Test.
902	Victor.....	Victor Co-op. Creamery.....	Co-op.	H. Whitworth, Secretary	Victor.....	Geo. W. Baitinger.....	S. & G. C. Separator	Test.
903	Williamsburg.....	Troy Creamery.....	Co-op.	Geo. C. House, Secretary	Williamsburg.....	E. E. Montgomery.....	Separator	Test.
904	Williamsburg.....	Troy Creamery (s).....	Co-op.	Geo. C. House, Secretary	Williamsburg.....	T. Winter.....	Separator	Test.
905	Yorkshire.....	Yorkshire Creamery company.....	Co-op.	H. W. Huebepohl, Sec	Williamsburg R. 1.....		Separator	Test.
906	North English.....	Yorkshire Creamery Co. (s).....	Stock.	R. N. Morrell, Secretary.....	Ottumwa.....		S. & G. C. Separator	Test.
<i>Jackson County—</i>								
907	Fulton.....	Fulton Co-op. Creamery Co.....	Co-op.	John Hilde, Secretary	Fulton.....	Howard Coulson.....	Separator	Test.
908	Monmouth.....	Monmouth Creamery.....	Indiv.	J. P. Younger.....	40 barsbers St. Chicago.....		S. & G. C. Separator	Test.
909	Maquoketa.....	Farmers' Union Co-op. Crm. Co.....	Co-op.	W. N. Miller, Secretary.....	Maquoketa.....	C. Poast.....	S. & G. C. Separator	Test.

410	Miles.....	Spring Brook Creamery	Indiv.	John Newman Company	Elgin, Ill.	A. J. Spohn..	Separator	Test.
411	Zwingie.....	Other Creek Creamery	Indiv.	Geo. Laible, Proprietor	Zwingie.....	J. T. Mogle..	S. & G. O.	Test.
412	Preston.....	Preston Creamery Association	Co-op.	Samuel McNeil, Secretary	Preston.....	John Smith...	Separator	Test.
413	Preston.....	Preston Creamery Ass'n (s)	Co-op.	Samuel McNeil, Secretary	Preston.....	John Smith...	Separator	Test.
414	Preston.....	Spring Brook Creamery	Indiv.	John Newman Company	Elgin, Ill.	A. J. Negus..	Separator	Test.
415	Springville.....	Spring Brook Creamery (s)	Indiv.	John Newman Company	Elgin, Ill.	A. J. Negus..	Separator	Test.
416	Union Center.....	Spring Brook Creamery	Indiv.	John Newman Company	Elgin, Ill.	A. J. Negus..	Separator	Test.
417	Lamoette.....	Sterling Separator Creamery	Indiv.	Kreier & Dupont	Lamoette.....	J. M. Hoffman.	S. & G. O.	Test.
418	St. Donatus.....	St. Donatus Creamery	Indiv.	Andrew Nimmo	St. Donatus..	P. J. Dupont..	S. & G. O.	Test.
419	Baldwin.....	Diamond Creamery Co. (s)	Indiv.	E. D. Hansen, Proprietor	Macquoketa..	O. C. Clifton	Separator	Test.
420	Macquoketa.....	Hansen Cold Storage company	Indiv.	E. D. Hansen, Proprietor	Macquoketa..	J. C. Nemmers	Hand Sep	Test.
421	Macquoketa.....	Lamoette Creamery	Indiv.	John Newman Company	Lamoette.....	J. C. Danielson	S. & G. O.	Test.
422	Macquoketa.....	Spring Brook Creamery	Indiv.	John Newman Company	Elgin, Ill.	J. C. Danielson	S. & G. O.	Test.
<i>Jasper County</i>								
423	Baxter.....	Baxter Dairy company	Co-op.	H. Krampe, Jr., Secretary	Baxter.....	H. C. Schettler	Separator	Test.
424	Newton.....	Newton Co-op Creamery	Co-op.	D. A. Bohne, Secretary	Newton.....	A. B. Olson...	Gath. Or.	Test.
425	Newburg.....	Newburg Creamery company	Stock.	D. G. Alden, Secretary	Newburg.....	H. E. Webb...	S. & G. O.	Test.
<i>Jefferson County</i>								
426	Fairfield.....	Fairfield Creamery	Co-op.	Jacob Roth, Secretary	Fairfield.....	George Y. Ross	S. & G. O.	Test.
427	Four Corners.....	Four Corners Co-op. Crm. Co	Co-op.	C. L. Schuber, Secretary	Lockridge, R. I.	C. L. Schuber	Separator	Test.
428	Salina.....	Salina Creamery	Co-op.	J. Schillerstrom	Salina.....	H. S. Wood...	Separator	Test.
429	Glendale.....	Yorksires Creamery Co. (s)	Stock.	R. N. Morrell, Secretary	Ottumwa.....	.....	Separator	Test.
<i>Johnson County</i>								
430	Oxford.....	Oxford Creamery	Indiv.	Adam Floerelinger	Oxford.....	.....	S. & G. O.	Test.
<i>Jones County</i>								
431	Anamosa.....	Fawn Creek Creamery	Indiv.	J. S. Condit	Anamosa.....	W. D. Romine	S. & G. O.	Test.
432	Monticello.....	Clover Leaf Creamery Co	Co-op.	P. A. Stuchwell, Secretary	Monticello.....	P. A. Stockwell	Separator	Test.
433	Amber.....	Amber Creamery	Indiv.	James P. Younger, Prop.	Chicago.....	H. W. Belka..	Separator	Test.
434	Center Junction.....	Center Junction Creamery	Indiv.	James P. Younger, 40 Dearborn Street	Chicago.....	A. E. Robertson	S. & G. O.	Test.
435	Hale.....	Hale Creamery	Stock.	C. E. Walston, Secretary	Hale.....	W. H. Brownell	Separator	Test.
436	Langworthy.....	Langworthy Co-op. Creamery	Co-op.	C. E. Bates, Secretary	Langworthy..	J. H. Batchelder	Separator	Test.
437	Martelle.....	Martelle Creamery	Co-op.	Batchelder Bros.	Martelle.....	S. Batchelder	Separator	Test.
438	Klondike.....	Klondike Creamery	Indiv.	R. Bohsen, Secretary	Monticello.....	S. Kleckner...	S. & G. O.	Test.
439	Diamond.....	Diamond Creamery	Indiv.	Andrew Nimmo	Monticello.....	Henry J. Rehorst	S. & G. O.	Test.
440	Diamond.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo	Monticello.....	.....	S. & G. O.	Test.
441	Diamond.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo	Monticello.....	.....	S. & G. O.	Test.
442	Diamond.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo	Monticello.....	.....	S. & G. O.	Test.
443	Diamond.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo	Monticello.....	.....	S. & G. O.	Test.
444	Diamond.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo	Monticello.....	.....	S. & G. O.	Test.
445	Diamond.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo	Monticello.....	.....	S. & G. O.	Test.

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
446	Monticello.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo.....	Monticello.....	.....	S & G. C.	Test.
447	Wyoming.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo.....	Monticello.....	.....	S & G. C.	Test.
448	Oxford Junction.....	Diamond Creamery (s)	Indiv.	Andrew Nimmo.....	Monticello.....	.....	S & G. C.	Test.
449	Oxlow.....	Clay Valley Co-op. Crm. Ass'n.	Co-op.	John D. Neelous, Secretary	Oxlow.....	Fred Huyck.....	Separator	Test.
450	Olin.....	Jackson Center Creamery.....	Indiv.	E. E. Snyder.....	Olin.....	E. E. Gluck.....	Separator	Test.
451	Olin.....	Olin Creamery.....	Indiv.	Condit & Swanson.....	Olin.....	T. Swanson.....	Separator	Test.
452	Scotch Grove.....	Scotch Grove Co-op. Crm. Co.	Co-op.	J. H. Balster, Secretary.....	Scotch Grove.....	H. C. Dice.....	Separator	Test.
453	Wyoming.....	Wyoming Co-op. Crm. Ass'n.	Co-op.	L. M. Barrett, Secretary.....	Wyoming.....	S. M. Conley.....	S & G. C.	Test.
<i>Keokuk County—</i>								
454	Delta.....	Delta Creamery.....	Indiv.	E. S. Sturdevant.....	Delta.....	.....	Separator	Test.
455	Webster.....	Yorkshire Creamery (s)	Indiv.	R. N. Morrell.....	Ottumwa.....	.....	Separator	Test.
456	Hayesville.....	Yorkshire Creamery (s)	Indiv.	R. N. Morrell.....	Ottumwa.....	.....	Separator	Test.
<i>Kossuth County—</i>								
457	Algona.....	Algona Co-op. Creamery.....	Co-op.	A. W. Sterzbach, Secretary	Algona.....	A. W. Sterzbach.....	Separator	Test.
458	Algona.....	Plum Creek Creamery.....	Co-op.	C. W. Hopkins.....	Algona.....	W. G. Sterzbach.....	Separator	Test.
459	Burt.....	Burt Co-op. Creamery company.....	Co-op.	August Dau, Secretary.....	Burt.....	D. L. Driver.....	S & G. C.	Test.
460	Bancroft.....	Bancroft Co-op. Creamery.....	Co-op.	John Barnhardt, Secretary	Bancroft.....	A. J. Dolleschal.....	Separator	Test.
461	Fenton.....	Fenton Creamery company.....	Co-op.	F. C. Newell, Secretary	Fenton.....	H. W. Pettibone.....	Separator	Test.
462	Germania.....	Germania Co-op. Creamery Co.	Co-op.	Peter Graves, Secretary.....	Germania.....	John Lundborg.....	S & G. C.	Test.
463	Hobart.....	Hobart Creamery.....	Indiv.	R. W. Wester.....	Hobart.....	R. Wester.....	S & G. C.	Test.
464	Irvington.....	Irvington Co-op. Creamery Co.	Co-op.	S. R. Roney, Secretary.....	Algona.....	L. P. Anderson.....	Separator	Test.
465	La Verne.....	La Verne Co-op. Crm. Assn.	Co-op.	R. W. Hanna, Secretary.....	La Verne.....	C. T. Adams.....	S & G. C.	Test.
466	Lone Rock.....	Lone Rock Co-op. Creamery Co.	Co-op.	Howard McChesney, Sec.	Lone Rock.....	L. C. Jenkins.....	Separator	Test.
467	Ledyard.....	Farmers Co-op. Crm. Assn.	Co-op.	E. J. Skinner, Secretary.....	Ledyard.....	H. N. Dyer.....	Separator	Test.
468	Seneca.....	Farmers Co-op. Creamery.....	Co-op.	M. Jensen, Secretary.....	Seneca.....	A. J. Johnson.....	Separator	Test.
469	Sexton.....	Sexton Co-op. Creamery Co.	Co-op.	Chas. A. Little, Secretary.....	Sexton.....	T. M. Sorenson.....	Separator	Test.
470	St. Benedict.....	Farmers Co-op. Creamery Co.	Co-op.	Leo J. Wegman, Secretary.....	St. Benedict.....	M. M. Sorenson.....	Separator	Test.
471	St. Joseph.....	St. Joseph Co-op. Creamery Co.	Co-op.	E. G. Clark, Sec.....	St. Joseph.....	Christ Bogh.....	Separator	Test.
472	Swea City.....	Swea City Co-op. Creamery Co.	Co-op.	St. Joseph.....	Swea City.....	Bengt S. Nelson.....	S & G. C.	Test.
473	Titonka.....	German Valley Co-op. Crm. Co.	Co-op.	Herman Nelson, Secretary.....	Titonka.....	Ben Frank.....	Separator	Test.
474	Lotta Creek.....	Lotta Creek Co-op. Creamery.....	Co-op.	August Boettcher.....	Lotta Creek.....	M. J. Dyer.....	Separator	Test.
475	Whitemore.....	Whitemore Creamery Co.	Co-op.	Thomas Carmody, Sec.....	Whitemore.....	Ed Walsh.....	Separator	Test.
476	West Bend.....	Garfield Creamery company.....	Stock	J. M. Borden, Secretary.....	West Bend.....	W. H. Cutshaw.....	Separator	Test.
477	Wesley.....	Wesley Creamery.....	Indiv.	R. W. Wester.....	Hobart.....	H. F. Hollenbach.....	Cath. Cr.	Test.

478	Linn County—	Anamosa.....	Gold Spring Association.....	Indiv.	Vint Smith, Secretary.....	Anamosa.....	Vint Smith.....	Separator	Hund.
479		Central City.....	North Linn Creamery.....	Stock	P. W. Sawyer, Secretary.....	Central City.....	R. R. Richardson.....	S. & G. C.	Test.
480		Central City.....	Ro's Creamery.....	Indiv.	P. W. W. Ross, Proprietor.....	Central City.....	W. W. Ross.....	S. & G. C.	Hund.
481		Central City.....	Valley Farm Creamery.....	Indiv.	P. G. Henderson.....	Central City.....	St. Elmo Wright.....	S. & G. C.	Test.
482		Coggon.....	Coggon Creamery.....	Indiv.	J. J. McArvey.....	Coggon.....	J. J. McArvey.....	Separator	Test.
483		Coggon.....	North Side Creamery.....	Co-op.	N. H. Trefz, Secretary.....	Coggon.....	Fred Lehman.....	Sepa. Or.	Test.
484		Cedar Rapids.....	Capital City Creamery.....	Stock	G. T. Benson, Manager.....	Cedar Rapids.....	.....	Gath. Or.	Test.
485		Center Point.....	Center Point Creamery.....	Indiv.	Mrs. O. M. Fisher.....	Center Point.....	O. M. Fisher.....	S. & G. C.	Test.
486		Ely.....	Ely & Western Creamery.....	Co-op.	Frank J. Dolezal, Secretary.....	Ely.....	Charles Trozell.....	Separator	Test.
487		Western.....	Minchard Creamery.....	Indiv.	Frank J. Dolezal, Secretary.....	Ely.....	.....	Separator	Test.
488		Anamosa.....	Minchard Creamery.....	Indiv.	I. P. Minchard.....	Anamosa.....	Port Wilkinson.....	Separator	Test.
489		Rogers.....	North Linn Creamery.....	Stock	P. W. Sawyer.....	Central City.....	A. C. Minchard.....	S. & G. C.	Test.
490		Springville.....	Springville Creamery.....	Indiv.	Batchelder Bros.....	Springville.....	O. E. Batchelder.....	S. & G. C.	Test.
491		Troy Mills.....	Troy Mills Creamery.....	Indiv.	J. M. Tupper, Proprietor.....	Troy Mills.....	J. M. Tupper.....	S. & G. C.	Test.
492		Troy.....	Highland Creamery company.....	Co-op.	John Iehl, Secretary.....	Walker.....	G. R. Batchelder.....	Separator	Hund.
493		Waukeet.....	Waukeet Creamery.....	Indiv.	.....	Walker.....	.....	Separator	Test.
494		Walker.....	Walker Creamery.....	Indiv.	H. J. Nietert.....	Walker.....	S. W. Laird.....	S. & G. C.	Test.
495		Viola.....	Viola Creamery.....	Indiv.	O. N. Pollock.....	Viola.....	O. N. Pollock.....	Separator	Test.
496		Prairieburg.....	Diamond Creamery Co. (s).....	Indiv.	Andrew Nimmo.....	Monticello.....	.....	S. & G. C.	Test.
497		Cedar Rapids.....	Cedar Rapids Cream. & Butter Co.....	Indiv.	F. W. Beyer.....	Cedar Rapids.....	.....	Hand Sep.	Test.
498		Parake.....	Springville Creamery (s).....	Indiv.	Batchelder Bros.....	Springville.....	.....	S. & G. C.	Test.
499	Lucas County—	Derby.....	Old Colony Creamery (s).....	Indiv.	T. G. Hyde, Manager.....	Humeston.....	.....	Separator	Test.
500	Lyon County—	George.....	George Creamery.....	Indiv.	W. P. Jennings.....	George.....	J. E. Vogel.....	S. & G. C.	Test.
501		Little Rock.....	Little Rock Co-op. Cream. Assn.....	Co-op.	R. E. Stenzel, Secretary.....	Little Rock.....	O. W. Dubus.....	S. & G. C.	Test.
502	Madison County—	Maxburg.....	Hebron Creamery (s).....	Indiv.	D. F. Hammers.....	Hebron.....	.....	S. & G. C.	Test.
503	Maxburg.....	New Sharon.....	New Sharon Creamery Co.....	Stock	W. J. Nicholson, Secretary.....	New Sharon.....	Henry Martin.....	Hand Sep.	Test.
504	Marion County—	Pella.....	Pella Creamery.....	Indiv.	J. J. Bonasquet.....	Pella.....	T. Smoronberg.....	Gath. Or.	Test.
505		Dallas.....	Beatrice Creamery Co. (s).....	Stock	Beatrice Creamery Co.....	Des Moines.....	.....	Separator	Test.

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of re-ceiving milk.
<i>Marshall County—</i>								
506	Clemons .....	Minerva Valley Creamery Co. . .	Co-op.	A. A. Bartine, Secretary . . .	Clemons .....	G. R. Jackman	Gath. Cr.	Oil Test
507	Dunbar .....	Dunbar Creamery company . . .	Co-op.	O. J. Osen, Secretary . . .	Dunbar .....	Wm. Helgason.	Separator	Test.
508	Liscomb .....	Liscomb Cheese company . . .	Stock.	Thomas E. Culp . . .	Liscomb .....	Thos. E. Culp . .	Gath. Cr.	Test.
509	State Center .....	State Center Far. Cr. Assn. . . .	Co-op.	O. Hansen . . .	State Center. . .	N. E. Laurensen.	S. & G. O.	Oil Test.
<i>Mills County—</i>								
510	Mincola .....	Waterloo Creamery Co. (s) . . .	Stock.	Leroy Corlis. . .	Council Bluffs.	.....	Separator	Test.
511	Silver City .....	Waterloo Creamery Co. (s) . . .	Stock.	Leroy Corlis. . .	Council Bluffs.	.....	Separator	Test.
512	York Township .....	Waterloo Creamery Co. (s) . . .	Stock.	Leroy Corlis. . .	Council Bluffs.	.....	Separator	Test.
<i>Mitchell County—</i>								
513	David .....	David Co-operative Creamery Co	Co-op.	F. N. Griffin, Secretary . . .	David .....	V. Fairbrother.	Gath. Cr.	Test.
514	Little Cedar .....	Little Cedar Creamery Co . . .	Co-op.	O. Makepeace . . .	Little Cedar . .	Chas. Woodiwise	S. & G. O.	Test.
515	Osgo .....	Rock Creek Co-op. Crm. Assn. .	Co-op.	H. L. Johnson . . .	Rudd, R. F. D . .	S. Klemearud . .	Gath. Cr.	Oil test.
516	Orchard .....	Farmers Co-op. Crm. Assn. . . .	Co-op.	J. W. Clay, Secretary . . .	Orchard .....	M. M. Blanden . .	Gath. Cr.	Oil test.
517	Riceville .....	Riceville Co-op. Crm. Assn. . . .	Co-op.	F. J. Carpenter, Secretary .	Riceville .....	A. B. Blanden . .	Gath. Cr.	Test.
518	Stacyville .....	Stacyville Creamery . . .	Indiv.	J. B. Tolleson & Co . . .	Stacyville .....	J. B. Spensley . .	S. & G. O.	Test.
519	St. Ansgar .....	Farmers Creamery . . .	Co-op.	J. M. Tolleson, Secretary . .	St. Ansgar . . .	B. C. Iliff . . .	Gath. Cr.	Test.
520	Tooterville .....	Tooterville Co-op. Creamery Co	Co-op.	L. C. Baker . . .	Tooterville . . .	A. N. Hofland . .	Hand Sep	Test.
521	New Haven .....	Farmers Co-op. Creamery . . .	Co-op.	D. C. Thomas, Secretary . .	New Haven . . .	D. C. Thomas . .	Gath. Cr.	Oil test.
522	Osgo .....	Osgo Co-op. Creamery Assn. . .	Co-op.	Joan Torsled, Secretary . . .	Mitchell .....	Geo. Helfter . . .	Gath. Cr.	Test.
<i>Monona County—</i>								
523	Moorhead .....	Moorhead Creamery . . .	Indiv.	P. D. Nelson . . .	Moorhead .....	P. D. Nelson . . .	S. & G. O.	Test.
<i>Monroe County—</i>								
524	Albia .....	Albia Creamery. . . . .	Indiv.	S. D. Thompson . . .	Albia .....	S. D. Thompson .	S. & G. O.	Test.

<i>Muscatine County—</i>		Indiv.	Geo. W. Kelley	Wilcox Junction	E. E. Hesson	Gath. Cr. Separator	Test.
526	Wilcox						
528	West Liberty	Indiv.					Test.
<i>O'Brien County—</i>		Stock.	Fred Hoeckman	Germanatown	Wm. Gehrls	Separator	Test.
527	Germanatown						
528	Hartley	Indiv.	A. D. Roseboom	Hartley	A. D. Roseboom	Gath. Or.	Test.
529	Paulina	Stock	W. Strampe, Secretary	Paulina	W. S. Strampe	Separator	Test.
530	Pringle	Indiv.	D. H. Hubbard	Correctionsville	G. A. Bristol	Ha d Sep	Test.
531	Sheldon	Indiv.	D. A. Miller, Proprietor	Sheldon	F. L. Francisco	S. & G. O.	Test.
<i>Oscola County—</i>		Indiv.	Kramer & Davis, Prop	Ashton	O. W. Davis	S. & G. O	Test.
532	Ashton						
533	Sibley	Indiv.	C. A. Smith	Sibley	Dick Oogrove	Hand Sep	Test.
<i>Page County—</i>		Stock.	W. T. S. White, Manager	Clarinda	J. C. Hall	Hand Sep	Test.
534	Clarinda						
<i>Palo Alto County—</i>		Co-op.	O. H. Cookinham	Ayrshire	F. W. Shellman	Separator	Test.
535	Ayrshire						
536	Cylinder	Co-op.	Theo. Delmouth, Secretary	Cylinder	E. P. Conway	Separator	Test.
537	Curlew	Co-op.	R. H. Glenn	Curlew		Separator	Test.
538	Emmettsburg	Co-op.	Lewis Stuchmer	Emmettsburg	N. H. Knudsen	Separator	Test.
539	Fairville	Stock	Joseph Kilegel	Fairville	W. D. Kucker	Separator	Test.
540	Gracett	Stock	Lars C. Christenson	Gracett	J. N. Brock	Separator	Test.
541	Gracett	Co-op.	R. L. Lamb, Secretary	Gracett	W. W. Bond	S. & G. O	Test.
542	Gracett	Co-op.	R. C. Truog, Secretary	Gracett	J. Finell	S. & G. O	Test.
543	Gracett	Co-op.	E. F. McVey, Secretary	Gracett	W. A. Thayer	S. & G. O	Test.
544	Gracett	Co-op.	B. A. Smith	Gracett	W. H. Anderson	Separator	Test.
545	Gracett	Co-op.	Chas. E. Yocum	Gracett	Emil Anderson	S. & G. O	Test.
546	Gracett	Co-op.	C. J. Fry, Secretary	Gracett	T. A. Clarke	S. & G. O	Test.
547	Gracett	Co-op.	Geo. W. Brown, Secretary	Gracett	Jas P. Larsen	S. & G. O	Test.
548	Gracett	Co-op.	Wm. Reardon	Gracett		S. & G. O	Test.
<i>Plymouth County—</i>		Indiv.	Payne Bros	Kingsley	Ira Stewart	Gath. Or.	Test.
550	Kingsley						
551	Marion	Co-op.	H. F. Maus, Secretary	Marion	J. Kennedy	S. & G. O	Test.
552	Marion	Co-op.	E. F. Maus, Secretary	Marion	Wm. Anderson	Separator	Test.
553	Marion	Indiv.	Harford Produce company	Marion		Gath. Or.	Test.
554	Marion	Indiv.	Harford Produce company	Marion		Gath. Or.	Test.

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of re-celving milk.
<b>Pocahontas County—</b>								
555	Laurens .....	Laurens Creamery .....	Indiv.	W. & J. G. Hinn, Props	Laurens .....	F. W. Johnson ..	Hand Sep	Test.
556	Palmer .....	Bizard Creamery .....	Stock.	Geo. Siebela, Sec'y	Gilmore City ..	Ed Richards .....	Separator	Test.
557	Plover .....	Breholz Creamery .....	Indiv.	Wm. Breholz .....	Pomeroy .....	Wm Breholz .....	S. & G. O.	Test.
558	Plover .....	Plover Mercantile company ..	Stock.	H. Figg's-ard, Manager ..	Plover .....	Geo. Heathman ..	Hand Sep	Test.
559	Pocahontas ..	Pocahontas Creamery .....	Indiv.	W & J. G. Hinn .....	Laurens .....	R. S. Lybarger ..	Hand Sep	Test.
560	Laurens .....	Gilt Edge Creamery .....	Indiv.	W. R. Rogers .....	Rolfe .....	W. R. Rogers .....	S. & G. O.	Test.
<b>Polk County—</b>								
561	Des Moines ..	Beatrice Creamery company ..	Stock.	W. J. Stewart .....	Grimes .....	E. J. Stewart .....	Gath. Cr.	Test.
562	Grimes .....	Grimes Butter and Cheese Co.	Stock.	W. J. Stewart .....	Grimes .....	S. & G. O.	S. & G. O.	Test.
563	Campbell .....	Grimes But. and Cheese Co. (s)	Stock.	W. J. Stewart .....	Grimes .....	S. & G. O.	S. & G. O.	Test.
564	Mitchellville ..	Mitchellville Creamery Assn. ..	Co op.	A. J. McCleary .....	Mitchellville ..	O. H. Phillips .....	Separator	Test.
565	Des Moines ..	Des Moines Creamery .....	Stock.	E. J. Schumacher .....	Des Moines .....	W. S. Gould .....	S. & G. O.	Test.
566	Des Moines ..	Capital Creamery company .....	Stock.	Keller J. Ball, Manager .....	Des Moines .....	P. G. Hanna .....	Hand Sep	Test.
567	Des Moines ..	Crystal Springs Creamery .....	Indiv.	MacKae Bros. ....	Des Moines .....	.....	Gath. Cr.	Test.
<b>Pottawatomie County—</b>								
568	Avoca .....	Avoca Creamery .....	Indiv.	P. T. Hansen .....	Avoca .....	Ernest Hansen ..	Hand Sep	Test.
569	Walnut .....	Avoca Creamery (s) .....	Indiv.	P. T. Hansen .....	Avoca .....	.....	Hand Sep	Test.
570	Council Bluffs ..	Waterloo Creamery company ..	Stock.	Leroy Corlies, Secretary ..	Council Bluffs ..	Chas. Bomberger ..	Hand Sep	Test.
571	Underwood .....	Waterloo Creamery company(s)	Stock.	Leroy Corlies, Secretary ..	Council Bluffs ..	.....	S. & G. O.	Test.
572	Hudson .....	Hancock Creamery .....	Indiv.	Wm. H. C. Brandes, Sec.	Hancock .....	Wm. Ray .....	S. & G. O.	Test.
573	Minden .....	York Creamery .....	Co-op.	B. E. Enberger .....	Minden .....	.....	Separator	Test.
574	Minden .....	Minden Creamery .....	Indiv.	N. P. Jorgensen .....	Minden .....	John Isaac .....	Gath. Cr.	Test.
575	Neola .....	Neola Creamery .....	Indiv.	E. B. Ryan .....	Neola .....	.....	Separator	Test.
<b>Poweshiek County—</b>								
576	Deep River .....	Deep River Creamery .....	Indiv.	H. W. Hatter .....	Deep River .....	.....	Gath. Cr.	Oil Test.
577	Guernsey .....	Springbrook Creamery .....	Indiv.	John Newman Company ..	Elgin, Ill .....	O. W. Hicks .....	S. & G. O.	Test.
578	Fairmont .....	Springbrook Creamery (s) .....	Indiv.	John Newman Company ..	Elgin, Ill .....	.....	S. & G. O.	Test.

579	Grinnell.....	Indiv.	J. W. Fowler.....	Grinnell.....	M. J. Powers.....	Hand Sep	Test.
580	Hartwick.....	Indiv.	John Newman Company.....	Elgin, Ill.....	Wm. Tibbs.....	S. & G. C.	Test.
581	Montezuma.....	Co-op.	A. C. Heath, Secretary.....	Montezuma.....	E. B. Collee.....	S. & G. C.	Test.
<i>Sac County—</i>							
582	Early.....	Indiv.	G. A. Dermo.....	Early.....	C. A. Dermo.....	S. & G. C.	Test.
583	Herring.....	Indiv.	M. R. Wright.....	Herring.....	M. R. Wright.....	S. & G. C.	Test.
584	Lake View.....	Indiv.	S. O. Rice.....	Stratford.....	O. S. Holladay.....	S. & G. C.	Test.
585	Nemaha.....	Co-op.	Clark N. Searle.....	Nemaha.....	A. J. Grotland.....	S. & G. C.	Test.
586	Delaware's Creamery Co.	Co-op.	J. A. Cranson.....	Odebolt.....	Edw. McFarland.....	S. & G. C.	Test.
587	Schaller.....	Indiv.	Perry Rubendall.....	Schaller.....	Perry Rubendall.....	Gath. Or.	Test.
588	Storm Lake.....	Co-op.	Thomas A. Hearn.....	Storm Lake.....	M. P. O'Grady.....	S. & G. C.	Test.
589	Wall Lake.....	Indiv.	Thomas A. Hearn.....	Wall Lake.....	Thomas Deacon.....	S. & G. C.	Test.
<i>Scott County—</i>							
590	Walcott.....	Indiv.	Wm. Koberg.....	Walcott, R. I.....	Wm. Kotorg.....	† and Sep	Test.
591	Long Grove.....	Indiv.	J. H. Marriott.....	Long Grove.....	J. E. Swartz.....	Gath. Or.	Test.
<i>Shelby County</i>							
592	Corley.....	Co-op.	A. C. Dinesen.....	Avoca.....	W. F. Pettee.....	Hand Sep	Test.
593	Earling.....	Stock.	Alex. Anderson.....	Earling.....	Alex. Anderson.....	S. & G. C.	Test.
594	Harlan.....	Co-op.	W. M. Obrecht, Secretary.....	Harlan.....	M. Jensen.....	Hand Sep	Test.
595	Jacksonville.....	Co-op.	R. Rasmussen.....	Kirkman.....	P. Nymann.....	Separator	Test.
596	Kirkman.....	Co-op.	J. C. Jensen.....	Kirkman.....	Julius Anderson.....	S. & G. C.	Test.
597	Marn.....	Co-op.	P. M. Peterson.....	Marn.....	Peter Thunerson.....	S. & G. C.	Test.
598	Portsmouth.....	Indiv.	M. A. Borenson.....	Portsmouth.....	M. Ankersden.....	Hand Sep	Test.
599	Prairie Rose Creamery.....	Co-op.	J. D. Lorenzen.....	Walnut.....	Rudolph Weise.....	Separator	Test.
600	Waterloo Creamery Co. (s).....	Stock.	Leroy Corlies.....	Council Bluffs.....		Separator	Test.
<i>Sioux County</i>							
601	Alton.....	Indiv.	Geo. R. Mueller.....	Alton.....	Geo. R. Mueller.....	Hand Sep	Test.
602	Granville.....	Stock.	Hanford Produce company.....	Sioux City.....		Separator	Test.
603	Hosper.....	Indiv.	Stower & Borteman.....	Hosper.....	John J. Marx.....	Hand Sep	Test.
604	Hawarden.....	Indiv.	L. M. Lynn.....	Hawarden.....	R. J. Hesler.....	Hand Sep	Test.
605	Hull.....	Indiv.	Rud. Stensvad.....	Hull.....	E. Den. Herder.....	Hand Sep	Test.
606	Rock Valley.....	Indiv.	C. H. Day, Proprietor.....	Rock Valley.....	A. G. Paulson.....	Hand Sep	Test.
<i>Story County—</i>							
607	Ames.....	State.	G. L. McKay, Manager.....	Ames.....	De La Sheldon.....	S. & G. C.	Test.
608	Cambridge.....	Co-op.	H. V. King, Secretary.....	Cambridge.....	J. F. Barrette.....	S. & G. C.	Test.
609	Clio.....	Co-op.	M. Yeager, Secretary.....	Clio.....	E. R. Mitchell.....	Gath. Or.	Test.
610	Gilbert Station.....	Co-op.	A. H. Sheidahl.....	Gilbert Station.....	E. P. Lake.....	S. & G. C.	Test.
611	Huxley.....	Co-op.	A. H. Sheidahl.....	Huxley.....	P. J. Severade.....	Separator	Test.
612	Maxwell.....	Stock.	Beatrice Creamery Co.....	Des Moines.....		Separator	Test.
613	Elwell.....	Stock.	Beatrice Creamery Co.....	Des Moines.....		Separator	Test.

## CREAMERY TEST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or rather cream.	Method of receiving milk.
614	Roland.....	Roland Farmers Creamery Co.	Co-op.	L. T. Olson, Secretary.	Roland.....	S. H. Jonbal.....	Separator	Test.
615	Story City.....	Story City Farmers Co-op. Crm.	Co-op.	Alex Henderson.....	Story City.....	Geo. Wick.....	S. & G. C.	Test.
616	Slater.....	Slater Farmers Creamery Co.	Co-op.	Andrew Mayland, Secretary	Slater.....	R. J. Severeld.....	Separator	Test.
617	Zearing.....	Zearing Creamery company....	Stock.	C. F. Bean.....	Zearing.....	R. R. Hadley.....	S. & G. C.	Test.
<i>Tama County—</i>								
618	Chelsea.....	Springbrook.....	Indiv.	John Newman Company.....	Elgin, Ill.....	J. G. Bucher.....	S. & G. C.	Test.
619	Elberon.....	Springbrook.....	Indiv.	John Newman Company.....	Elgin, Ill.....	Chas. Bucher.....	S. & G. C.	Test.
620	Tama.....	Tama Co-op. Creamery Co.....	Stock.	L. O. Carson, Secretary.....	Tama.....	W. H. Graham.....	Hand Sep	Test.
621	Clutier.....	Clutier Creamery company....	Indiv.	E. D. Armstrong.....	Clutier.....	E. D. Armstrong.....	Gath. Cr.	Test.
<i>Taylor County—</i>								
622	Clearfield.....	Clearfield Creamery company.	Stock.	Joe Doubet.....	Clearfield.....	Geo. McNair.....	Hand Sep	Test.
623	Bedford.....	The Bedford Creamery.....	Indiv.	A. E. Lake, Manager.....	Bedford.....	Leslie C. Klopp..	Hand Sep	Test.
<i>Union County—</i>								
624	Afton.....	Afton Creamery.....	Indiv.	G. W. Kelly.....	Afton.....	V. O. Williams.....	Hand Sep	Test.
625	Creston.....	Clarinda Poultry, But. & Egg Co	Indiv.	W. T. S. White, Manager..	Clarinda.....	.....	Hand Sep	Test.
<i>Van Buren County—</i>								
626	Bonaparte.....	Yorkshire Creamery (s).....	Indiv.	John Morrell Company.....	Ottumwa.....	.....	Separator	Test.
627	Milton.....	Yorkshire Creamery (s).....	Indiv.	John Morrell Company.....	Ottumwa.....	.....	Separator	Test.
628	Douds.....	Yorkshire Creamery (s).....	Indiv.	John Morrell Company.....	Ottumwa.....	.....	Separator	Test.
<i>Wapello County—</i>								
629	Blakesburg ..	Blakesburg Creamery.....	Indiv.	Foland Bros.....	Blakesburg.....	Foland Bros.....	Separator	Test.
630	Ottumwa.....	Yorkshire Creamery.....	Indiv.	R. N. Morrell, Secretary	Ottumwa.....	J. H. Davis.....	S. & G. C.	Test.
<i>Warren County—</i>								
631	Clarinda.....	Clarinda Co-op. Crm. Company.	Co-op.	C. Brancamp.....	Clarinda.....	H. Owens.....	Separator	Test.
632	Indianola.....	Warren County Creamery.....	Indiv.	Charley Taylor.....	Indianola.....	.....	Separator	Test.

Washington County—		Indiv.	W. G. Brooks Nelson & Son	Kalona..... Riverside.....	W. G. Brooke... Ray Law.....	Gath. Cr. Gath. Cr.	Oil Test Oil Test
633	Kalona Creamery.....	Indiv.					
634	Riverside Creamery.....	Indiv.					
Wayne County—							
635	Hametson.....	Indiv.	Jas. L. Humphreys.....	New Bedford, Mass.....	W. F. Beck.....	S. & G. C.	Test.
636	Lewisburg.....	Indiv.	Jas. L. Humphreys.....	New Bedford, Mass.....		S. & G. C.	Test.
637	Corydon.....	Indiv.	Jas. L. Humphreys.....	New Bedford, Mass.....		S. & G. C.	Test.
Webster County—							
638	Clare Creamery.....	Indiv.	J. A. Blakeman.....	Clare.....	J. A. Blakeman.....	S. & G. C.	Test.
639	Duncombe Creamery.....	Indiv.	Samuel Smith.....	Duncombe.....	R. A. Orelland.....	S. & G. C.	Test.
640	Fort Dodge.....	Stock.	C. V. Rosenberger.....	Independence.....	S. H. Deutscher.....	S. & G. C.	Test.
Winnemago County—							
641	Buffalo Center.....	Co-op.	Geo. J. Andrews, Sec.....	Buffalo Center.....	A. Wooley.....	S. & G. C.	Test.
642	Forest City Co-op. Crm. Ass'n.....	Co-op.	John Carson, Secretary.....	Forest City.....	Lewis Richards.....	S. & G. C.	Test.
643	Ireland.....	Co-op.	John Carson, Secretary.....	Forest City.....		S. & G. C.	Test.
644	Forest City Co-op. Crm. Ass'n.....	Co-op.	John Carson, Secretary.....	Forest City.....	T. A. Storvick.....	S. & G. C.	Test.
645	Lake Mills Creamery company.....	Co-op.	J. A. Horvel.....	Lake Mills.....		S. & G. C.	Test.
646	Dahls Church.....	Co-op.	J. A. Horvel.....	Lake Mills.....		S. & G. C.	Test.
647	Newton Twp.....	Co-op.	J. H. Horvel.....	Lake Mills.....		S. & G. C.	Test.
648	Lake Mills Creamery Co., (s).....	Co-op.	E. Quamme.....	Lake Mills.....		S. & G. C.	Test.
649	Lincoln Co-op. Crm. Company.....	Co-op.	K. M. Larson, Manager.....	Rake.....	P. N. Peterson.....	S. & G. C.	Test.
650	Scarville.....	Co-op.	K. M. Larson, Manager.....	Scarville.....	W. J. Nagel.....	S. & G. C.	Test.
651	Annand.....	Co-op.	N. Berg, Manager.....	Annand.....	E. A. Gudvangen.....	S. & G. C.	Test.
652	Thompson.....	Stock.	I. M. Berg, Manager.....	Thompson.....	Morris Erdal.....	S. & G. C.	Test.
653	Hollandale.....	Indiv.	J. H. Anderson, Secretary.....	Thompson.....	Enos Albertson.....	S. & G. C.	Test.
654	Lake Mills.....	Co-op.	J. C. Peterson.....	Wagon.....		S. & G. C.	Test.
655	Fertile Co-op. Dairy Co. (s).....	Co-op.	J. T. Tallackson.....	Fertile.....		S. & G. C.	Test.
Winneshiek County—							
656	Barr Oak.....	Co-op.	C. A. Reed.....	Barr Oak.....	V. V. Johnson.....	Gath. Cr.	Oil Test
657	Calmar Creamery.....	Indiv.	Boe & Nelson.....	Calmar.....	E. A. Hoopman.....	Gath. Cr.	Oil Test
658	Decorah.....	Indiv.	Johnson & Klome.....	Decorah.....	T. W. Fortney.....	Gath. Cr.	Oil Test
659	Fort Atkinson.....	Stock.	H. R. Carpenter, Secretary.....	Decorah.....	H. B. Fortney.....	Gath. Cr.	Oil Test
660	Easton.....	Co-op.	W. A. Schrandt, Manager.....	Calmar, R. 1.....	Henry Hease.....	Gath. Cr.	Oil Test
661	Highlandville.....	Indiv.	Bidne & Akre.....	Highlandville.....	P. J. Bidne.....	Gath. Cr.	Oil Test
662	Rock Springs Creamery.....	Co-op.	P. M. Peterson.....	Spring Grove.....		Gath. Cr.	Oil Test
663	Heper Creamery.....	Indiv.	T. J. Weader, Supt.....	Heper.....	P. M. Peterson.....	Gath. Cr.	Oil Test
664	Kendallville.....	Indiv.	Boe, Nelson & Co.....	Kendallville.....	J. H. Hatt.....	Gath. Cr.	Oil Test
665	Nordness.....	Stock.	K. N. Edgesad, Sec.....	Nordness.....	Ed Holmes.....	Gath. Cr.	Oil Test
666	Red Oak Creamery Company.....	Co-op.	J. E. Rannev, Secretary.....	Decorah, R. 1.....	Krud Hauge.....	Gath. Cr.	Oil Test
667	Silver Spring Creamery Co.....	Stock.	N. J. Nicholson, Sec.....	Decorah, R. 2.....	Hans Foss.....	Gath. Cr.	Oil Test
	Ossian.....				Ole Hauge.....	Gath. Cr.	Oil Test

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Gathered cream.	Method of receiving milk.
668	Ridgeway .....	L. T. Fosse & Sons .....	Indiv.	L. T. Fosse .....	Ridgeway .....	O. A. Fosse .....	Gath. Or.	Oil Test
669	Ridgeway .....	L. T. Fosse & Sons (s) .....	Indiv.	L. T. Fosse .....	Ridgeway .....	G. A. Bakkin .....	Gath. Or.	Oil Test
670	Ridgeway .....	Lincoln Farmers Co-op. Crm. .....	Co-op.	A. W. Frann, Secretary .....	Ridgeway .....		Gath. Or.	Oil Test
	Woodbury County							
671	Correctionville ..	Hopkins & Hubbard .....	Indiv.	A. W. Hubbard, Manager .....	Correctionville ..	M. J. Goodnow ..	Hand Sep	Test.
672	Sioux City .....	Hanford Produce Company .....	Stock.	A. S. Hanford, President ..	Sioux City .....	M. O. Wheelock ..	Hand Sep	Test.
	Worth County							
673	Fertile .....	Fertile Co-op. Dairy Company ..	Co-op.	J. T. Tallackson, Sec. .....	Fertile .....	J. A. Johnson .....	Separator	Test.
674	Joice .....	Nordland Creamery .....	Co-op.	O. J. Krouse, Secretary .....	Joice .....	A. H. Nelson .....	Separator	Test.
675	Kensett .....	Danville Co-op. Cream'y Assn. ..	Co-op.	H. K. Myli, Secretary .....	Kensett .....	Gilbert Olson .....	S. & G. C.	Test.
676	Manly .....	Farmers' Co-op. Cream'y Assn. ..	Co-op.	E. R. Stock, Secretary .....	Manly .....	Il. E. Ford .....	S. & G. C.	Test.
677	Miltonville .....	Lorenzen Bros. Creamery .....	Indiv.	P. Lorenzen .....	Miltonville .....	P. Lorenzen .....	Gath. Or.	Test.
678	Northwood .....	Farmers' B. & O. Association .....	Co-op.	M. D. Johnson, Secretary .....	Northwood, R. 8 ..	R. S. Bergsather ..	S. & G. C.	Test.
679	Northwood .....	Hartland Dairy Association .....	Stock.	E. L. Loberg, Manager .....	Northwood .....	A. M. Hanson .....	Separator	Test.
680	Northwood .....	Brookfield Creamery Assn. ....	Co-op.	E. A. Tenold, Secretary .....	Northwood .....	A. C. Talle .....	S. & G. C.	Test.
681	Bristol .....	Lake Mills Creamery Co. (s) .....	Co-op.	J. A. Horrie, Manager .....	Northwood .....		Separator	Test.
682	Kensett .....	Farmers' Co-op. Cream'y Assn. ..	Co-op.	O. G. Anderson, Secretary ..	Lake Mills .....	W. O. Dahlen .....	Separator	Test.
683	Grafton .....	Grafton Creamery .....	Indiv.	Henry White .....	Kensett .....	Don White .....	S. & G. C.	Test.
	Wright County							
684	Belmond .....	Norway Co-op. Creamery Co. ....	Co-op.	J. W. Baxter, Secretary .....	Belmond, R. 2 .....	O. H. Vanderham ..	Hand Sep	Oil Test
685	Clarton .....	Clarton Creamery .....	Co-op.	O. P. Morton, Secretary .....	Clarton .....	P. W. Umbriet .....	Gath. Cr.	Oil Test
686	Goldfield .....	Fountain Creamery .....	Indiv.	DeWitt Goodrich .....	Goldfield .....	DeWitt Goodrich ..	Hand Sep	Oil Test
687	Galt .....	Galt Creamery Company .....	Stock.	A. K. Ke chum .....	Clarton R. 6 .....	A. Fatland .....	S. & G. C.	Test.
688	Palaville .....	Palaville Creamery Company .....	Co op.	F. O. Loate, Secretary .....	Belmond .....	M. Greenfield .....	Separator	Test.
689	Rowan .....	Rowan Co-op. Creamery .....	Co-op.	J. H. Dix, Secretary .....	Rowan .....	Charles Heath .....	Separator	Test.

## IOWA CHEESE FACTORY LIST.

Alphabetically Arranged According to Counties and Towns Near Which Factory is Located, Together with Information Pertaining to Each.

Office record number.	Located at or Near.	Name of Cheese Factory.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Cheese Maker.	Method of re-ceiving milk.
1	<i>Adams County</i> — Cumberland.... <i>Appanoose County</i> — Hiattville .....	Lincoln Center Cheese Factory..... Hiattville Cheese Factory .....	Indiv...	Henry Fleharty, Proprietor	Hayes .....	Henry Fleharty.	Hundred.
2	<i>Benton County</i> — Atkins .....	Ideal Cheese Factory .....	Indiv...	W. O. Hiatt, Proprietor....	Centerville, R. 2 ....	W. O. Hiatt.....	Hundred.
3	<i>Black Hawk County</i> — Waterloo .....	The Fowler Co. .... North Star Cheese Factory.....	Stock .. Stock ..	A. C. Stewart, Proprietor..	Atkins .....	J. W. Stewart ..	Hundred.
4	<i>Bremser County</i> — Janesville.....	The Fowler Co.....	Stock ..	The Fowler Co .....	Waterloo .. Waterloo ..	F. E. Wightman John St. John...	Test. Test.
5	<i>Cerro Gordo County</i> — Burchinal .....	Burchinal Cheese Factory .....	Indiv...	T. R. Coates, Proprietor...	Burchinal .....	T. R. Coates.....	Test.
6	<i>Crawford County</i> — Astor .....	Astor Cheese company .....	Co-op ..	O. A. Olson, Secretary.....	Astor .....	Gay B. Teeple...	Hundred.

## IOWA CHEESE FACTORY LIST—CONTINUED.

Office record number.	Located at or Near.	Name of Cheese Factory.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Cheese Maker.	Method of receiving milk.
	Clarke County	—					
9	Weldon .....	Weldon Cheese Factory .....	Indiv...	L. M. Parr, Proprietor. ....	Weldon .....	Mrs. L. M. Parr	Hundred.
	Floyd County—						
10	Charles City .....	Elm Springs Factory .....	Indiv...	H. D. White, Proprietor. ....	Charles City .....	Walter B. Pfeiffer	Hundred.
	Greene County	—					
11	Dana .....	Dana Mutual Co-op. Crm. Company.	Co-op ..	W. J. Elling, Secretary .....	Dana .....	W. J. Elling. ....	Test.
	Guthrie County	—					
12	Jamaica .....	Jamaica Cheese Factory .....	Co-op ..	Goreham Bros. ....	Jamaica .....	W. E. Goreham.	Hundred.
	Hardin County	—					
13	Iowa Falls .....	Ellis Cheese Factory .....	Stock ..	W. I. Clark .....	Iowa Falls, R. 8. ...	W. I. Clark .....	Hundred.
	Howard County—						
14	Cresco .....	Cresco Cheese Factory .....	Indiv...	Wm. Kellow, Jr. ....	Cresco .....	W. N. Lathrop ..	Hund.
15	Cresco .....	Clover Leaf Cheese Factory .....	Indiv ..	J. J. House .....	Cresco .....	J. J. House .....	Hund.
	Humboldt County—						
16	Ln Verne .....	Pioneer Cheese Factory .....	Indiv...	Jacob Regez. ....	Monroe, Wisconsin	Ben Roder .....	Test.
	Henry County —						
17	Noble .....	The Christner Butter and Cheese Co	Indiv...	O. C. Christner. ....	Wayland .....	Ralph Hood .....	Test.
	Jefferson County—						
18	Brighton .....	Pleasant Plain Cheese Factory .....	Indiv...	J. H. Samsen .....	Pleasant Plains .....	J. H. Samsen .....	Test.
19	Veo .....	Veo Cheese Factory .....	Stock ..	E. A. Hosler .....	Veo .....	H. W. Spencer ..	Test.

Keokuk County—		Stock	Cliff on Tucker	Talleyrand	Clifton Tucker	Test.
20	Talleyrand .....	Stock	Cliff on Tucker .....	Talleyrand .....	Clifton Tucker ..	Test.
Lee County—						
21	Franklin Station ..	Stock	Henry G. Ort .....	Donnellson, R. 1....	A. W. Newell...	Test.
Monroe County—						
22	Albia .....	Indiv.	S. G. Bone .....	Albia .....	Joe Bone .....	Hund.
Marshall County—						
23	Liscomb .....	Stock	Thomas E. Culp .....	Liscomb .....	Thos. E. Oulp...	Test.
Muscatine County—						
24	Wilton Junction.	Co-op	Fritz Kolb, Secretary .....	Wilton Junction ....	Homer Carson...	Hund.
Poweshiek County—						
25	Grinnell .....	Indiv.	J. W. Fowler .....	Grinnell .....	.....	Test.
26	Jacobs .....	Indiv.	A. C. Payne .....	Jacobs .....	L. A. Wilson....	Test.
Scott County—						
27	Princeton .....	Stock	Chas. A. Pope .....	Princeton .....	Geo. L. Ayers...	Test.
Story County—						
28	Iowa Center .....	Indiv.	J. Q. Moore .....	Iowa Center .....	W. H. Moore....	Test.
29	Ames .....	State	G. L. McKay, Manager ..	Ames .....	.....	Test.
Taylor County—						
30	Sharpsburg .....	Indiv.	G. S. Eastlack .....	Sharpsburg .....	G. S. Eastlack ..	Hund.
31	Blockton .....	Indiv.	Waldrip & Bonafeld .....	Blockton .....	Waldrip & Bonafeld ..	Hund.
Washington County—						
32	West Chester .....	Indiv.	W. E. Leet .....	West Chester .....	W. E. Leet .....	Hund.
33	Clay .....	Stock	O. Meachman .....	Richland, R. 2 .....	O. W. Hake .....	Test.
Wayne County—						
34	Promise City .....	Co-op	C. R. Noble .....	Promise City .....	C. R. Noble .....	Hund.
35	Sewall .....	Stock	R. N. Farnsworth .....	Sewall .....	Samuel Sanger...	Hund.
36	Linville .....	Indiv.	Mathew De Haan .....	Linville .....	Mathew De Haan ..	Hund.
37	Seymour .....	Stock	E. A. Weagley, Secretary ..	Seymour .....	E. E. Spencer...	Hund.

## STATISTICS OF THE CREAMERIES.

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In the following table will be found certain information in regard to the numbers and manner of operating the creameries of this State. The list this year shows a decrease from that of last year of 101 plants, of which 44 were skimming stations. The report for the year previous showed that 61 skimming stations were closed making a total number of stations closed for the last two years of 105, during which time there were 31 skimming stations built.

Creameries listed under the head of "individual" are those that are owned by one person or a partnership or firm. Those listed as "co-operative" and "stock company" are very nearly all creameries commonly called co-operative, from which it will be seen that about thirty-five per cent of the creameries of this State are operated on a plan other than the so-called co-operative system.

There are still almost 300 creameries in this State that receive practically nothing but milk. The eighty-five gathered cream creameries and the seventy hand separator creameries receive nothing but cream, the latter from hand separators only.

Of the six hundred seventy-two plants listed as buying milk or cream by the test, forty-one buy cream by the inch and use the oil test churn to determine how much butter must be paid for. Nineteen creameries still buy milk and pay a uniform price per hundred pounds.

A study of the location of the creameries that have closed in the last two or three years will show that, speaking generally, it has been the "individual" plants that have succumbed to the adverse conditions that have prevailed. The co-operatives have better been able to hold their own against the new forms of competition.

## OWNERSHIP—OPERATION—MILK BY TEST—NEW CHANGES.

Counties.	Ownership— Individual, Co-Operative or Stock Company.					How Operated.				Rec'y's Milk By Test Or By Cwt.		New Creamer- ies and Skim Stations and Plants Closed.			
	No. of creameries.	No. of skim stations.	Individual.	Co-operative.	Stock company.	Separator.	Gathered cream.	Combined plant.	Exclusive hand sep- arator plant.	By test.	By cwt.	New creameries.	New skim stations.	Total.	Plants closed.
THE STATE .....	589	102	243	335	118	293	85	243	70	672	19	10	9	19	120
Adair.....	7	4	7	3	1	9		2		11					2
Adams.....	3	3	1	5		6				6		2	1	3	
Allamakee.....	7		2	5		1	3		8	7					
Appanoose.....															
Audubon.....	9			9		3		4	2	9					2
Benton.....	4		4				1	1	1	4					5
Black Hawk.....	16		3	12	1	14		1	1	16					1
Boone.....	2	1	1	2		2		1		3					1
Bremer.....	21		1	18	2	21				12	9				
Buchanan.....	10	4	2	6	6	7		7		14					3
Buena Vista.....	4			4				2	2	4					3
Butler.....	17	2	7	9	3	17	1		1	19					1
Calhoun.....	6	1	2	2	3	3		4		7					1
Carroll.....	8	1	3	3	3	5	1	1	2	8	1		1	1	4
Cass.....	3			3		2		1		3					4
Cedar.....	8	1	8		1	4	3	2		7	2				
Cerro Gordo.....	6	1	5	2		2	5			7					
Cherokee.....	4		4				1	1	2	4					
Chickasaw.....	16	2	5	12	1	9	4	5		18					
Clarke.....															
Clay.....	6		3	2	1	3		2	1	6					2
Clayton.....	18	2	4	9	7	3	2	8	7	20			2	2	
Clinton.....	8	4	9	3		1		11		12					3
Crawford.....	2		1		1				2	2					1
Dallas.....	4	5	2	1	6	2		3	4	9		1		1	
Davis.....		5			5			5		5			1	1	
Decatur.....	1	4	4		1			4	1	5					
Delaware.....	24	2	5	17	4	13		12	1	26					
Des Moines.....															
Dickinson.....	4			3	1	1		3		4					
Dubuque.....	21	1	6	12	4	15		5	2	21	1	1		1	
Emmet.....	8			5	3	3		5	3	8					
Fayette.....	18		3	13	2	10		5	3	16	2				1
Floyd.....	5		3	2			5								1
Franklin.....	8	2	5	4	1	4	4	2		10					
Fremont.....															
Greene.....	2		1	1		2				2					2
Grundy.....	6		1	5		3		3		6					4
Guthrie.....	11		1	6	4	4	1	6		11		2		2	5
Hamilton.....	6	3	5	4		7		2		9					4
Hancock.....	8	2	2	8		3	3	3	1	10					2
Hardin.....	12	2	3	9	2	8		6		14					2
Harrison.....	2			2		2				2					
Henry.....															1
Howard.....	9		2	4	8	1	4	4		9					
Humboldt.....	11		1	9	1	2	1	8		11					
Ia.....	2		2					1	1	2					
Iowa.....	7	2		8	1	4		5		9					
Jackson.....	13	3	12	4		8		7	1	16		1		1	
Jasper.....	3			2	1	1	1	1		3					

## OWNERSHIP—OPERATION—MILK BY TEST—NEW CHANGES—CONTINUED.

Counties.	Ownership— Individual, Co-operative or Stock Company.					How Operated.				Rec'y's Milk By Test Or By Cwt.		New Creamer- ies and Skim Stations and Plants Closed.			
	No of creameries.	No. of skim stations.	Individual.	Co-operative.	Stock company.	Separator.	Gathered cream.	Combined plant.	Exclusive hand separator plant.	By test.	By cwt.	New creameries.	New skim stations.	Total.	Plants closed.
Jefferson.....	3	1	...	3	1	8	1	...	...	4	...	...	...	...	...
Johnson.....	1	1	...	1	...	...	...	1	...	1	...	...	...	...	1
Jones.....	14	9	16	6	1	9	...	14	...	23	...	...	...	...	2
Keokuk.....	1	2	8	...	...	8	...	...	...	8	...	...	1	1	1
Kossuth.....	21	...	2	18	1	14	1	6	...	21	...	...	...	...	1
Lee.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Linn.....	18	8	14	4	8	9	1	10	1	18	8	...	...	...	1
Louisa.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Lucas.....	...	1	1	...	...	1	...	...	...	1	...	...	...	...	1
Lucas.....	2	...	1	1	...	...	...	2	...	2	...	...	...	...	3
Lyon.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madison.....	...	1	1	...	...	...	...	1	...	1	...	...	1	1	...
Mahaska.....	1	...	...	...	1	...	...	...	1	1	...	...	...	...	1
Marion.....	1	1	1	...	1	1	1	...	...	2	...	...	...	...	1
Marshall.....	4	...	...	8	1	1	2	1	...	4	...	...	...	...	2
Mill.....	...	3	...	8	8	8	...	...	...	3	...	...	...	...	...
Mitchell.....	10	...	1	9	...	...	7	2	1	10	...	...	...	...	...
Monona.....	1	...	1	...	...	...	...	1	...	1	...	...	...	...	...
Monroe.....	1	...	1	...	...	...	...	1	...	1	...	...	...	...	...
Montgomery.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Muscatine.....	2	...	2	...	...	1	1	...	...	2	...	1	...	1	1
O'Brien.....	5	...	8	...	2	2	1	1	1	5	...	...	...	...	...
Osceola.....	2	...	2	...	...	...	...	1	1	2	...	...	...	...	1
Page.....	1	...	...	1	...	...	...	...	...	1	...	...	...	...	2
Palo Alto.....	14	1	...	18	2	8	...	...	...	15	...	...	...	...	...
Plymouth.....	3	2	8	2	...	1	8	...	...	5	...	...	...	...	...
Pocahontas.....	6	...	4	...	2	1	...	2	3	6	...	...	...	...	...
Polk.....	1	1	1	6	1	2	3	1	7	7	2	...	2	2	...
Pottawattamie.....	6	2	6	1	2	8	1	1	8	7	1	...	1	1	1
Poweshiek.....	5	1	5	1	...	...	1	4	1	6	...	...	...	...	1
Ringgold.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Sac.....	8	...	5	2	1	...	1	7	...	8	...	...	...	...	3
Scott.....	2	...	2	...	...	...	1	...	1	2	...	...	...	...	...
Shelby.....	8	1	1	6	2	3	...	3	3	9	...	...	...	...	1
Sioux.....	6	...	5	...	1	1	...	...	5	6	...	...	...	...	...
Story.....	9	2	1	7	8	5	1	6	...	11	...	1	1	4	...
Tama.....	4	...	8	...	1	...	1	2	1	4	...	...	...	...	1
Taylor.....	2	...	1	...	1	...	...	...	2	2	...	...	...	...	...
Union.....	2	...	2	...	...	...	...	...	2	2	...	...	...	...	...
Van Buren.....	...	3	8	...	...	8	...	...	...	8	...	...	...	...	...
Wapello.....	2	...	2	...	...	1	...	1	...	2	...	...	...	...	1
Warren.....	2	...	1	1	...	2	...	...	...	2	...	...	...	...	1
Washington.....	2	...	2	...	...	...	2	...	...	2	...	...	...	...	1
Wayne.....	1	2	8	...	...	...	...	3	...	3	...	...	...	...	2
Webster.....	3	...	2	...	1	...	...	3	...	3	...	...	...	...	1
Winnebago.....	8	7	1	12	2	4	...	11	...	15	...	...	...	...	3
Winnechick.....	14	1	7	5	8	...	16	...	...	15	...	...	...	...	...
Woodbury.....	2	...	1	...	1	...	...	...	2	2	...	...	...	...	...
Worth.....	10	1	2	8	1	5	1	5	...	11	...	...	...	...	1
Wright.....	6	...	1	4	1	2	1	1	2	6	...	...	...	...	1
THE STATE.....	159	102	243	835	118	296	86	243	70	672	19	10	9	19	120

Of the creameries reported as paying by test, forty-one are using the oil test churn and the cream is bought by the inch instead of by weight. Of the plants closed forty-four were skimming stations only.

## COMPARISONS.

	1897	1898	1899	1900	1901	1902	1903	1904
Total number of creameries and skim stations	891	954	997	994	980	919	792	691
OWNERSHIP.								
Individual . . . . .	504	516	501	524	497	377	306	242
Co-operative . . . . .	349	349	349	364	380	376	350	335
Stock company . . . . .	87	88	116	105	102	165	135	118
State property . . . . .	1	1	1	1	1	1	1	1
PLAN OF OPERATION.								
Separator . . . . .			842	853	772	748	533	298
Gathered cream . . . . .			71	85	92	105	119	45
Combined plant . . . . .			50	56	96	65	185	243
* Exclusive hand separator . . . . .								70
BASIS OF RECEIVING MILK OR CREAM.								
By the test . . . . .			849	896	890	832	748	672
By weight or measure . . . . .			110	98	70	87	44	19
CREAMERY CHANGES.								
Number of new creameries . . . . .	} 188	90	55	87	85	34	25	10
Number of new skim stations . . . . .		43	83	84	18	22	16	9
Number of plants closed . . . . .		55	53	79	75	97	160	120

\* Before 1904 hand separator creameries were included as gathered cream plants.  
 In 1903 sixty-one skim stations closed; in 1904 forty-four skim stations closed.

## . RAILWAY BUTTER SHIPMENTS.

---

The following tables are made up from the statistics furnished by all the railroads of the state showing the amount of butter shipped from points in Iowa to points outside the state. Little or no butter is imported into the state in any form and the figures in the following tables practically represent the surplus production of the state. It is estimated that about 65,000,000 pounds of butter are made and consumed in the state, so that the total production is about 140,000,000 pounds, having an aggregate value of \$28,000,000.

In the following tables the numbers showing pounds of butter shipped from each county must not be understood as representing the amount of butter produced in the respective counties. For instance, the counties highest on the list—Woodbury, Polk and Lee—are not large producers of butter. Woodbury and Polk counties contain centralized creameries making large quantities of butter, and all of these counties have process butter factories making large quantities of butter, but none of them are the source of any great proportion of the butter which is manufactured and shipped in the county. The same thing is true, in less degree, in regard to other counties.

TABLE SHOWING NUMBER OF CREAMERIES—GROSS POUNDS  
OF BUTTER SHIPPED OUT OF STATE.

Counties.	Number of Creameries for 1903 and 1904.		Gross Pounds of Butter Shipped out of the State for the Years Ending September 30, 1903 and 1904, Showing Increase and Decrease by Counties.			
	1903.	1904	1903	1904	Increase.	Decrease.
THE STATE.....	792	691	93,761,661	90,844,358	.....	3,417,803
Adair.....	18	11	592,912	771,124	178,212	.....
Adams.....	8	6	171,648	61,810	.....	109,838
Allamakee.....	7	7	1,439,747	1,460,583	.....	20,164
Appanoosa.....	.....	.....	113,387	71,199	.....	42,168
Audubon.....	11	9	990,587	1,070,759	80,222	.....
Benton.....	10	4	797,321	503,516	.....	293,805
Black Hawk.....	17	16	1,494,374	1,292,165	.....	202,709
Boone.....	4	8	71,617	35,359	13,742	.....
Bremer.....	21	21	2,493,330	2,511,439	14,559	.....
Buchanan.....	17	14	2,442,070	2,155,332	.....	287,338
Buena Vista.....	7	4	1,094,595	1,004,419	.....	90,176
Butler.....	20	19	1,327,671	1,380,684	52,966	.....
Calhoun.....	8	7	1,574,950	1,298,779	.....	363,171
Carroll.....	12	9	1,530,618	1,515,908	.....	5,810
Cass.....	7	8	226,102	86,541	.....	139,561
Cedar.....	9	9	418,508	446,422	27,914	.....
Cerro Gordo.....	7	7	645,449	973,595	328,147	.....
Cherokee.....	4	4	171,463	216,275	44,812	.....
Chickasaw.....	18	18	2,619,271	2,239,708	.....	339,563
Clarke.....	.....	.....	13,755	10,855	.....	7,900
Clay.....	8	6	614,818	814,490	200,172	.....
Clayton.....	18	20	3,916,094	3,203,473	.....	706,621
Clinton.....	15	12	690,676	1,077,206	416,580	.....
Crawford.....	8	2	958,798	1,041,330	58,062	.....
Dallas.....	8	9	731,682	475,697	.....	255,985
Davis.....	4	5	47,187	100	.....	47,087
Decatur.....	5	5	125,640	117,828	.....	7,812
Delaware.....	26	26	2,987,296	2,406,235	.....	580,971
Des Moines.....	.....	.....	301,670	317,320	15,850	.....
Dickinson.....	4	4	1,201,551	649,881	.....	551,670
Dubuque.....	23	22	2,733,755	2,710,439	.....	23,316
Emmet.....	8	8	354,436	539,439	.....	184,997
Fayette.....	19	18	2,494,653	2,408,110	.....	86,543
Floyd.....	6	5	924,553	951,374	27,016	.....
Franklin.....	10	10	372,920	588,959	166,039	.....
Fremont.....	.....	.....	3,368	181,421	177,553	.....
Greene.....	4	2	230,652	187,688	.....	42,964
Grundy.....	10	6	703,638	737,397	34,199	.....
Guthrie.....	15	11	1,180,018	1,000,443	.....	179,575
Hamilton.....	18	9	1,654,582	1,379,534	.....	274,928
Hancock.....	12	10	461,156	599,880	138,724	.....
Hardin.....	16	14	1,629,760	1,644,681	14,971	.....
Harrison.....	2	2	340,375	337,619	.....	2,756
Henry.....	1	.....	84,423	63,735	.....	20,638
Howard.....	9	9	1,360,360	1,199,978	.....	160,382
Humboldt.....	11	11	794,480	366,333	71,353	.....
Ia.....	2	2	214,230	229,485	15,195	.....
Iowa.....	10	9	693,339	733,359	45,470	.....
Jackson.....	16	16	1,404,308	1,666,333	238,080	.....
Jasper.....	6	8	297,380	275,000	.....	22,380

TABLE SHOWING NUMBER OF CREAMERIES—GROSS POUNDS OF BUTTER SHIPPED OUT OF STATE—CONTINUED.

Counties.	Number of Creameries for 1903 and 1904.		Gross Pounds of Butter Shipped out of the State for the Years Ending September 30, 1903 and 1904, Showing Increase and Decrease by Counties.			
	1903	1904	1903	1904	Increase.	Decrease
Jefferson.....	4	4	110,752	116,792	6,040	.....
Johnson.....	2	1	124,705	325,419	196,713	.....
Jones.....	26	23	8,925,068	8,595,621	.....	329,447
Keokuk.....	3	3	453,281	141,032	.....	297,199
Kossuth.....	22	21	1,732,170	1,532,354	70,184	.....
Lee.....	.....	.....	2,234,066	2,930,166	746,160	.....
Linn.....	22	21	1,507,438	1,625,547	119,064	.....
Louis.....	1	.....	51,449	21,184	.....	30,265
Lucas.....	2	1	.....	99,711	99,711	.....
Lyon.....	5	2	234,374	204,058	29,684	.....
Madison.....	.....	1	25,668	25,666	2	.....
Mahaaka.....	2	1	692,598	115,780	.....	576,738
Marion.....	3	2	67,550	101,235	33,735	.....
Marshall.....	3	4	526,492	633,606	107,117	.....
Mills.....	6	3	14,961	8,585	.....	11,123
Mitchell.....	10	10	1,577,956	1,405,516	.....	172,440
Monona.....	1	1	60,735	72,921	12,126	.....
Monroe.....	1	1	53,667	18,850	.....	19,817
Montgomery.....	1	.....	149,058	72,231	.....	77,427
Muscatine.....	2	2	123,118	62,993	.....	60,125
O'Brien.....	5	5	673,065	337,220	159,155	.....
Oceola.....	3	2	305,169	475,045	169,876	.....
Page.....	3	1	2,108,622	720,735	.....	1,383,187
Palo Alto.....	15	15	1,524,245	1,230,396	.....	293,409
Plymouth.....	6	5	464,980	593,031	118,051	.....
Pocahontas.....	3	6	644,098	456,821	.....	186,177
Polk.....	5	7	3,224,270	4,012,762	788,492	.....
Potawattamie.....	3	3	324,394	353,547	29,153	.....
Poweshiek.....	7	6	407,818	1,012,113	604,295	.....
Ringgold.....	2	.....	12,307	.....	.....	12,307
Sac.....	11	3	699,777	701,012	1,235	.....
Scott.....	2	2	326,631	305,443	.....	20,388
Shelby.....	10	9	231,851	513,208	281,357	.....
Sioux.....	6	6	944,706	1,194,390	249,684	.....
Story.....	14	11	1,388,206	1,064,669	.....	323,537
Tama.....	5	4	545,966	697,049	141,144	.....
Taylor.....	2	2	513,096	960,027	446,931	.....
Union.....	9	2	633,011	531,432	.....	56,329
Van Buren.....	3	3	96,313	6,620	.....	90,193
Wapello.....	3	2	137,107	93,950	.....	43,157
Warren.....	3	2	.....	260	260	.....
Washington.....	5	2	403,126	260,979	.....	142,147
Wayne.....	4	3	794,455	957,156	162,701	.....
Webster.....	5	3	659,325	715,596	56,271	.....
Winnebago.....	6	5	1,105,416	1,177,089	71,633	.....
Winnechie.....	7	15	2,156,992	1,931,392	.....	225,600
Woodbury.....	2	2	7,320,139	6,283,584	.....	1,036,555
Worth.....	12	11	361,033	344,902	.....	16,131
Wright.....	7	6	791,216	1,027,392	236,176	.....
THE STATE.....	792	691	93,761,661	90,344,358	.....	3,417,303

# NET BUTTER SHIPMENTS BY COUNTIES AND RANK—AREA OF COUNTIES.

Showing pounds of butter shipped per square mile and rank of counties; also total net butter shipments for the State and net pounds per square mile, for the year ending September 30, 1904.

Counties.	Total net shipments of butter for the year.	Rank by total lbs. shipped.	Area of square miles in counties.	Pounds per square mile.	Rank by lbs. per square mile.
<b>THE STATE</b> .....	75,889,260	.....	55,475	1,885	.....
Adair .....	647,744	44	576	1,124	49
Adams .....	51,920	90	482	120	87
Allamakee .....	1,227,289	19	615	1,995	24
Appanoose .....	59,807	87	500	119	88
Audubon .....	890,488	29	482	2,082	22
Benton .....	422,053	59	720	587	65
Black Hawk .....	1,086,418	22	576	1,886	25
Boone .....	67,501	84	576	117	89
Bremer .....	2,100,607	7	482	4,767	5
Buchanan .....	1,810,479	11	576	3,149	10
Buena Vista .....	848,712	34	576	1,454	37
Butler .....	1,579,732	18	576	2,742	18
Calhoun .....	1,015,875	24	576	1,762	27
Carroll .....	1,272,884	18	576	2,209	21
Cass .....	72,696	83	576	126	84
Cedar .....	874,984	33	576	649	63
Cerro Gordo .....	820,550	37	576	1,424	39
Cherokee .....	181,671	73	576	815	74
Chickasaw .....	1,922,804	10	584	3,814	6
Clarke .....	9,118	94	482	21	94
Clay .....	688,174	43	576	1,194	46
Clayton .....	2,883,496	4	745	3,815	8
Clinton .....	904,853	28	680	1,330	41
Crawford .....	895,187	30	720	1,243	43
Dallas .....	399,586	60	576	698	60
Davis .....	84	98	500	.....	98
Decatur .....	98,975	77	584	110	90
Delaware .....	2,021,288	9	576	3,509	9
Des Moines .....	2,671,716	67	400	667	62
Dickinson .....	545,900	51	408	1,338	40
Dubuque .....	2,276,778	6	604	3,769	7
Emmet .....	453,128	56	408	1,112	50
Fayette .....	2,622,812	8	720	2,809	11
Floyd .....	799,832	39	504	1,502	34
Franklin .....	451,735	57	576	784	57
Fremont .....	152,498	75	514	297	75
Greene .....	187,667	74	570	2,766	12
Grundy .....	619,883	45	504	1,229	44
Guthrie .....	840,372	35	576	1,459	38
Hamilton .....	1,158,909	21	573	2,011	23
Hancock .....	461,899	55	576	802	56
Hardin .....	1,881,490	16	576	2,898	15
Harrison .....	288,599	65	684	414	69
Henry .....	58,579	88	432	124	85
Howard .....	1,007,981	25	460	2,191	19

## NET BUTTER SHIPMENTS BY COUNTIES AND RANK—AREA OF COUNTIES—CON.

Counties.	Total net shipments of butter for the year.	Rank by total lbs. shipped.	Area of square miles in counties.	Pounds per square mile.	Rank by lbs. per square mile.
Humboldt .....	727,719	40	432	1,687	33
Iida .....	192,767	72	432	446	
Iowa .....	610,641	46	576	1,060	51
Jackson .....	1,899,786	15	619	2,000	21
Jasper .....	281,000	60	720	321	73
Jefferson .....	98,105	77	432	229	
Johnson .....	271,771	66	576	470	
Jones .....	2,850,641	3	576	4,966	
Keokuk .....	118,508	76	576	206	
Kossuth .....	1,556,977	14	984	1,582	27
Lee .....	2,508,389	5	490	5,109	3
Linn .....	1,866,299	17	720	2,189	20
Louisa .....	17,794	98	396	45	
Lucas .....	53,757	81	432	194	
Lyon .....	221,808	70	600	369	
Madison .....	21,584	92	576	37	
Mahaska .....	97,255	79	576	169	
Marion .....	85,079	80	576	147	
Marshall .....	532,281	52	576	924	54
Mills .....	8,221	96	445	7	
Mitchell .....	1,180,688	20	480	2,251	17
Monona .....	61,258	85	432	142	
Monroe .....	32,634	91	432	75	
Montgomery .....	61,674	86	432	141	
Muscatine .....	52,914	89	435	121	
O'Brien .....	703,269	42	576	1,221	45
Osceola .....	399,087	61	408	978	53
Page .....	605,417	47	528	1,146	47
Palo Alto .....	1,083,902	28	576	1,795	36
Plymouth .....	489,746	53	820	597	64
Pocahontas .....	538,729	62	576	666	61
Polk .....	3,271,425	2	576	5,679	1
Pottawattamie .....	296,811	64	576	518	
Poweshiek .....	850,174	38	576	1,476	38
Ringgold .....		99	545		99
Sac .....	583,850	49	576	1,022	52
Scott .....	287,412	68	447	576	63
Shelby .....	481,094	58	576	748	57
Sioux .....	1,006,287	26	768	1,306	42
Story .....	894,831	31	576	1,553	31
Tama .....	577,121	50	720	710	56
Taylor .....	823,222	36	540	1,324	41
Union .....	498,403	54	432	1,130	43
Van Buren .....	5,500	95	502	11	
Wapello .....	78,918	82	432	188	
Warren .....	218	97	576		97
Washington .....	219,222	71	576	380	
Wayne .....	806,990	35	598	1,321	39
Webster .....	601,100	48	720	836	55
Winnebago .....	988,737	27	408	2,424	14
Winneshiek .....	1,622,869	12	696	2,331	14
Woodbury .....	5,876,214	1	364	1,225	
Worth .....	709,717	41	408	1,739	
Wright .....	953,009	32	576	1,498	
THE STATE .....	75,889,290		55,475	1,365	

TABLE SHOWING TOTAL NET BUTTER SHIPMENTS OF THE STATE FOR THE YEARS 1890 TO 1904, INCLUSIVE, FROM IOWA TO POINTS OUTSIDE THE STATE; ALSO INCREASE OR DECREASE AS COMPARED WITH THE YEAR PRECEDING.

Years Ending October 1.	Net pounds of butter shipped.	Increase over pre-ceding year.	Decrease from pre-ceding year.
1890.....	71,255,796		
1891.....	68,690,716		2,565,080
1892.....	60,112,981		8,577,735
1893.....	54,572,902		5,540,029
1894.....	54,509,417		68,485
1895.....	66,497,108	11,987,691	
1896.....	80,082,916	13,585,808	
1897.....	88,620,081	8,537,165	
1898.....	75,884,837		6,255,744
1899.....	76,620,526		744,011
1900.....	71,719,529		4,910,997
1901.....	74,868,665	3,144,666	
1902.....	72,714,584		2,149,411
1903.....	77,079,794	4,365,210	
1904.....	75,889,260		1,190,534

Counties shipping more than 1,000,000 pounds, net, of butter in the year ending September 30, 1904:

1904.	Counties.	1903.
5,587,214.....	Woodbury.....	6,148,916
3,271,425.....	Polk.....	2,708,886
2,850,641.....	Jones.....	3,297,892
2,668,436.....	Clayton.....	2,889,518
2,508,889.....	Lee.....	1,876,565
2,276,779.....	Dubuque.....	2,800,554
2,109,607.....	Bremer.....	1,297,379
2,022,812.....	Fayette.....	2,095,508
2,021,238.....	Delaware.....	2,492,458
1,922,804.....	Chickasaw.....	2,200,187
1,810,479.....	Buchanan.....	1,251,842
1,622,869.....	Winneeshiek.....	1,811,578
1,579,782.....	Butler.....	1,585,243
1,556,977.....	Kossuth.....	1,497,022
1,399,786.....	Jackson.....	1,182,974
1,381,480.....	Hardin.....	1,868,998
1,366,299.....	Linn.....	1,266,285
1,272,854.....	Carroll.....	1,277,814
1,227,289.....	Allamakee.....	1,251,886
1,180,663.....	Mitchell.....	1,325,483
1,158,909.....	Hamilton.....	1,889,848
1,086,418.....	Black Hawk.....	1,255,064
1,083,902.....	Palo Alto.....	1,280,865
1,015,375.....	Calhoun.....	1,822,968
1,007,981.....	Howard.....	1,142,702
1,006,287.....	Sioux.....	798,758
47,912,625.....	Totals.....	48,261,098

These twenty-six counties ship 60 per cent of the 75,889,260 net pounds of butter shipped from the state.



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NINETEENTH ANNUAL REPORT

OF THE

STATE DAIRY COMMISSIONER

TO THE

GOVERNOR OF THE STATE OF IOWA

FOR THE YEAR 1905

---

H. R. WRIGHT

STATE DAIRY COMMISSIONER

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY

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DES MOINES:  
BERNARD MURPHY, STATE PRINTER  
1906



LETTER OF TRANSMITTAL.

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*To His Excellency, ALBERT B. CUMMINS, Governor of Iowa:*

SIR—In compliance with the law, I have the honor to submit herewith the Nineteenth Annual Report of the Dairy Commissioner.

Very Respectfully,

H. R. WRIGHT,  
Dairy Commissioner.

DES MOINES, November 15, 1905.



**EXPENSE OF OFFICE OF DAIRY COMMISSIONER FOR THE  
YEAR ENDING NOVEMBER, 1, 1905.**

Dairy Commissioner's salary.....	\$	1,500.00		
Dairy commissioner's expense.....		<u>521.44</u>	\$	2,011.44
Deputy Dairy commissioner's salary.....	\$	1,200.00		
Deputy Dairy commissioner's expense.....		<u>208.15</u>	\$	1,408.'5
Assistant Dairy commissioner's salary (P. H. Kieffer).....	\$	1,200.00		
Assistant Dairy commissioner's expense (P. H. Kieffer).....		<u>1,072.97</u>		2,172.97
Assistant Dairy commissioner's salary (W. S. Smarzo).....	\$	1,200.00		
Assistant Dairy commissioner's expense (W. S. Smarzo).....		<u>1,191.45</u>	\$	2,391.45

**EXPENSE OF MILK INSPECTION IN FOURTEEN CITIES**

Milk Agents' Fees.....	\$	1,839.00		
Milk Agents' expense.....		<u>129.68</u>		
Milk Agents' special work.....		<u>3.00</u>	\$	1,971.68

**OFFICE EXPENSES.**

Legal expenses.....	\$	140.00		
Analyses.....		117.00		
Atlas .....		25.00		
Star Engraving Co.....		14.00		
Rubber Stamps.....		1.50		
Cream Albumenoid.....		1.25		
Oleo samples.....		<u>3.69</u>		302.44
Express, freight and cartage.....				43.19
Telegraph and Telephone.....				<u>21.94</u>
			\$	10,437.26
*Less salaries.....				<u>5,100.00</u>
			\$	5,337.26
Less rebates on mileage.....				<u>400.23</u>
Total expenditures from appropriations.....			\$	4,937.03
Average monthly expenses.....			\$	410.58

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\* Salaries are not paid from the specific appropriation. The amount appropriated for the biennial period extending from April 1, 1904, to July 1, 1906, 27 months, was \$12,825, of which has been expended in 19 months, \$7,812.40



## DAIRY COMMISSIONER'S REPORT.

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### CONDITIONS OF THE DAIRY INDUSTRY.

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This report shows a larger amount of creamery butter made in the State than ever before reported for any year since such reports have been made. Over 82,000,000 pounds of creamery made butter are shown to have been manufactured in this State for the year ending July 1, 1905, and the make of butter since that period has been phenomenal in amount. Not only is the amount of butter very high, but the price obtained for it is higher than the average price for any year since 1893. At the average price for the twelve months ending July 1, 1905, the New York value of the creamery butter made in this state was in excess of \$20,000,000, nearly \$5,000,000 more than the value for the next preceding twelve months.

Since 1900, the number of creameries in this State has been steadily decreasing, so that now we have 655 creameries and skim stations, whereas in 1900 the list showed 994. It must be understood, however, that there has not at any time been any corresponding decrease in the dairy business of the State, or the amount or value of the butter made. There have been, before this year, considerable decreases in the amount of butter made, but the causes of the decrease have been easily pointed out. A critical comparison of the amounts of butter made in the different counties and different parts of the State, will show that there has been a considerable increase in the last year in the northern and north-eastern part of the state—usually designated the dairy districts; but the largest amount of increase of creamery made butter has been in the southern half of the State. This part of the State, with the exception of a few counties, has never been known as a dairy section at all, and until the introduction of the hand separator and the practice of shipping cream to large central churning stations, the dairy business of the southern half of the State was very small. It never amounted to enough in a locality, so that creamery building was successful, except, of course, in a few instances; but the establishment of the central plants

and the shipping of cream by rail made possible the practice of the dairy business by an individual without any particular co-operation on the part of his neighbors. For this reason, there are dozens of localities south of the center of the State where the dairy business has trebled and quadrupled in the last eighteen months, to the very great advantage of the farmers in those counties. Without the centralizing plants and the railway facilities for cream shipping, this dairy business would not exist at all for the reason that the profits in farm-made butter are very small indeed, as compared with those of creamery-made butter. Twenty of these larger plants make a total of 17,627,000 pounds of butter,—twenty per cent of the total for the State. There can be no doubt that the principle of centralization of the creamery industry has been of very great value to the farmers of the southern and western parts of the State, where previously no creamery facilities were within their reach; and equally without doubt, the buttermaking industry of those parts of the State will, for a considerable time, at any rate, be controlled by the central plants; and, except in a few localities where the successful local creameries are now operated, the farmer will be compelled to choose between giving up the practice of dairying altogether and the shipping of his cream to the best market for butter fat within his reach.

It does not follow, however, that the centralization plan is the best either for the farmer or the industry as a whole. It is now, as suggested, the only plan available in many localities, and is very valuable for that reason. But there are plenty of places in the State where successful creameries of another kind are already established, and where also the central creameries have their purchasing agents for cream. There are several facts which ought to be recognized in regard to the centralization of cream for butter making. One of them is the question of expense of the plan. Under the head of "Iowa Manufactures, Dairy Products Second," following, some figures bearing on this subject are given and will repay some study. Under the almost universal practice now, the cream shipping creamery pays its local agent one cent a pound for butter fat purchased and the freight on the butter fat is about one cent a pound for butter fat in addition. So that the farmer has to pay about two cents a pound to get his butter fat to the creamery after he has taken it to the shipping station. That is to say the larger plant is handicapped at the start by two cents of expense more than attaches to the creamery that receives its cream direct from the wagon of the patron.

The cream shipping has another failing necessarily unavoidable, in that in many cases the cream purchased is a long time on the road, in hot weather, amid not too good surroundings, after having been purchased, tested and shipped by an agent, who, in the very great majority of cases, has had little or no experience in handling cream. This inevitably results in lowering the value of the cream for butter making purposes, and makes it impossible for even the best of buttermakers to make out of it butter that will bring the highest price, a loss which is, of course, visited upon the producer of the cream.

That the centralization plan is increasingly expensive, is shown by the fact that the net prices paid by them to the farmers at present is less than it was a year ago. At that time this office secured from the central plants themselves statements of the prices they had paid for butter fat for the first ten months of 1904. A comparison with New York prices for butter showed that their net prices for delivery to the creamery was from one-half to one and a quarter cents under New York prices. In order to compare with the present system, it is necessary to remember that for the first ten months of 1904 the centralizer operated upon the plan of buying cream from the individual shipper and that the shipper paid the freight directly, so that his net return was from one and a half to two and a quarter cents under New York. During the past summer, under the agency system, ruling prices have been always two cents under New York, nearly always three cents under New York, and sometimes four cents under the market. Of course, a general statement of this kind does not include the prices that have been paid by certain centralizing plants in localities where competition required a very high price in order to get any business, because in some cases prices above New York have been paid for butter fat and the accusation has been freely made that this was for the purpose, and with the effect of closing up the local creamery.

For a good many years the dairy commissioner and the professors of dairying at the college and a very large number of other persons interested in making the most out of the dairy business of the State have used every effort to induce farmers to take better care of their milk and cream to the end that better butter might be made to be sold for a higher price. Progress in the proper direction has always been entirely too slow to satisfy the dairy enthusiast. With the advent of the hand separator, it was discovered that the quality of cream delivered was much below the quality of milk delivered, and that the quality of butter made was actually deteriorating, and with the beginning of the cream

shipping system the quality of cream has still further deteriorated, for the reason, as already pointed out, that the cream does not reach the buttermaker as soon as it did under other systems, and hence the greater the deterioration. Competition between the central plants and the local plants has been so strong that in only a few localities is any kind of cream rejected. Hence, the farmer, instead of having an inducement for producing high-class cream, is actually encouraged by the situation to careless practices in the handling of his product. It is not practicable for the local creamery to reject his cream, because then he can ship it to the central plants. Up to the present, the cream has nearly all been paid for at the same price, regardless of its quality of cleanliness or wholesomeness. Practically the only grading of cream, as now practiced, is based on the percentage of butter fat, a less price being paid for low testing cream. If it were practicable for a creamery to receive all cream not unfit for the making of human food, and then make two grades of it, to be kept separate in the creamery and made into two lots of butter and sold and the butter fat paid for at its real value, then the farmer would have no cause to complain at all and would have an inducement of a cent and a half to two cents a pound for producing a better quality of cream. Not only would this be true with the man who now produces second grade stuff, but the same facts would be an inducement to the man who is now producing good cream, because, under the present system, he gets no more for the good cream which he produces at considerable extra expense and labor than does the other man, whose cream is bad.

Experience has shown, however, that such a plan would not probably be followed, except in a few cases. Then there is the further question of what legal enactments and measures would be of value in bringing about the desired result. The statute, at the present, provides a penalty for the sale of unwholesome cream, a statute that was enacted to cover the sale of sweet cream for immediate consumption, and which, of course, would be applicable in cases where unwholesome cream is sold or delivered to a creamery. The enforcement of this statute by the dairy commissioner is not at all practicable on account of the great number of sales of cream to be inspected, and for the further reason that, under the present situation, a partial enforcement, such as could be secured, would only serve as an irritation in view of the fact that so many of the creameries are willing and anxious to accept cream in any condition whatever. If now, an addition to this statute is secured, making it an offense of like character to purchase or receive unwholesome cream for buttermaking purposes, such a statute

would not only be practical, but would, to a large extent, enforce itself. The buttermaker, or creamery manager, would not take chances against a law which would cause him to suffer a fine of \$25 or \$100 and he would make the law an excuse for rejecting the unwholesome cream. Such a law as suggested, followed by any reasonable attempt at enforcement, would very greatly increase the quality of the butter made in the State, would protect the public from being imposed upon by butter made from unwholesome cream, and would add to the profits of the dairy farmers a very considerable amount.

#### WHAT THE FARMER SHOULD RECEIVE FOR HIS BUTTER FAT.

It is true that creameries vary greatly in size, efficiency of management and quality of butter made, but in the creameries of moderate size, making 160,000 to 175,000 pounds of butter it is easy to make the butter for a cent and a half a pound from the time the milk or cream comes into the factory until the butter goes into the car. If the buttermaker can make a twenty per cent overrun, as he ought to be able to do, then for every pound of butter fat for which he must pay he will have 1.2 pounds of butter which on a 20-cent market will sell for 24 cents, not taking account of the premium. The expense will be

Factory expense.....	1.5 cents
Freight .....	1.5 cents
Commission, 5 per cent.....	1.22 cents
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Total.....	4.22 cents

That is to say if he sells at the market he will lack .22 cents of being able to pay New York prices for butter fat. If he sells at a cent a pound premium he will have .78 cents a pound profits after paying New York price for butter fat. If the market is 25 cents a pound he will sell his 1.2 pounds of butter for 30 cents, and the expense will be the same except for commission which will be 1.5, making the total expense 4.5 cents, so that at this price, without premiums, he can pay all expenses of buttermaker's salary, expense of operation, freights and commissions and have money left. And in this day of universal premiums of at least a cent a pound, and prices above 20 cents the year around it is not too much to say that a good creamery should pay New York prices for butter fat—that the farmer is entitled to get, for butter fat delivered at the creamery, at least New York prices. Of course, if the creamery hires the cream collected and hauled to the creamery, or if the cream has to be handled by an agent or transported by freight

the cost of such collection must be borne by the farmer. Aside from such expense, if the farmer does not receive New York prices for his butter fat it is because of one of the following reasons:

1. The butter may not be as well sold as it should be. This is the manager's fault and can be easily remedied.

2. The overrun may not be as much as 20 per cent. If not this is the fault of the buttermaker and can be easily remedied.

3. The creamery may be so small that the butter is made at an expense of two or two and a half or three cents a pound. This can only be remedied by increasing the business, and if this is not possible the creamery is thereby handicapped in its competition with the larger creameries of whatever kind.

4. The cream and milk delivered at the creamery may be so poor that the best of buttermakers cannot make high selling butter out of it. This is the fault of the farmer who produces it and the buttermaker or manager who receives it and the loss is almost altogether visited upon the patron. This fault can only be removed by joint action of the buttermaker and the patron.

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## OVERRUN.

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Under present conditions of sharp and varied competition among creameries it is necessary to the successful operation of a creamery to make the most possible butter out of a given quantity of fat—to get the largest possible legitimate overrun. In the larger creameries a good deal of attention is given to this matter because it is closely connected with the question of profits. In the small creameries comparatively little attention is given to the matter except in a few instances. Our creameries average about 120,000 pounds of butter per year. The usual overrun used to be stated universally as one-sixth or about 16 per cent. When the month's work and payment were figured up and the overrun of butter over butter fat was computed, and deviation from a 16 per cent overrun, whether it was more or less than this amount, was invariably charged to inaccuracy in testing. While the fact was recognized that the amount of water and salt and casein in butter were variable quantities, it was scarcely suspected that skill in butter making could change any of these except, of course, the salt

which might be added in almost any amount. The Dairy Department at Ames, by a series of experiments and investigations showed that not only could a skillful buttermaker make his overrun almost anything he desired, but that certain buttermakers in successful creameries were already doing it; that a 16 per cent overrun could easily and legitimately be increased to 20 per cent or even 25 per cent overrun. That is, the skillful buttermaker can make butter having in it only 80 per cent of butter fat just as easily and as certainly as he can make butter containing 86 per cent of butter fat. In the one case he would have a 25 per cent overrun and in the other he would have the usual overrun of about 16 per cent. And the butter containing but 80 per cent of butter fat serves the purpose of the consumer, meets all the requirements of any market for flavor or body or qualities of any kind, violates no law either state or national and traverses no regulations of any kind or character. And yet with all these effects so perfectly understood, so often put in print and so thoroughly discussed, very few buttermakers know what their overrun is except from the books of the creamery at the end of the month, and very few creamery managers seem to care whether their buttermaker makes a proper overrun or not, he gets no more nor no less wages on account of his skill or lack of it in this particular. In a few cases the assistant dairy commissioners have found buttermakers claiming that they were getting habitually 20 or 22 per cent overrun, when tests of their butter showed but 12 or 14 per cent.

The average creamery makes about 120,000 pounds of butter a year, not counting in this the centralizing plants. At the average price for last year this butter sells for nearly \$30,000. A difference of only five per cent in the over run would amount to more than \$110 a month for this average creamery, nearly twice the buttermaker's salary. If his butter was so poor in quality as to lose this sum he would be promptly and properly discharged, but there is many a creamery in this state whose income could be easily increased in this particular an amount equal to that here mentioned by a proper increase in the overrun. The larger central plants, with which the smaller plants compete do get this large overrun and competition makes it necessary that the smaller ones who meet this competition shall get as good an overrun as their larger competitors or go out of business because of lack of ability to meet the competition. A difference of only 5 per cent in the over run makes, at last year's prices a cent and a quarter on the pound of butter fat, a difference of that much in the price the creamery can pay the farmer for his butter fat, three-quarters of a million of dollars for the creamery patrons of the state.

Too many creamery managers and buttermakers rely upon their computations at the end of the testing period in computing the overrun. A much better way is to find the overrun directly from the butter by analysis or other test. In such a method there can be no mistakes arising from improper or careless testing. It is in fact one method of determining whether the testing has been accurate or not. One of the central plants of this state regularly employs a chemist to analyze its butter so that proper steps may be taken to increase or decrease the overrun to the proper and legitimate proportion. Other central plants do something similar, so that they know every day from the butter itself just what its contents are and how much of the whole is butter fat and what percentage of overrun. This department in the report of last year, illustrated and explained apparatus designed in this office, for use with the Babcock test, to determine accurately the butter fat content of butter from which the overrun can be computed and the water content may be estimated with considerable accuracy. It is in use in only a few creameries of the State but is quite satisfactory and is the only apparatus in use in our creameries for the purpose. A chemical analysis in the hands of a competent chemist is the only way to get an absolutely accurate estimate of the constituents of a sample of butter, but of course the expense prohibits the smaller creameries from making use of such a system. But approximate results are sufficient in every day work and extremely valuable to the creamery operator.

The question of overrun is of the greatest importance from the standpoint of values and should receive more attention at the hands of the buttermakers and creamery operators.

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### PREMIUMS ON BUTTER.

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During the last ten years there has grown up the practice of paying a creamery more than the published and established official price in all of the markets. A half a cent premium used to be the cause of great pride on the part of the buttermakers whose butter sold for that premium. Now a full cent premium is almost universal, a cent and a half is common, and a cent and three-quarters or even two cents above the market is not by any means unknown. Seconds and firsts sell at the published price of extras and above, and the real extras nearly

or quite two cents above the market. Nearly every creamery visited by the assistant dairy commissioners receives a premium, and only those making the very poorest quality confess to receiving less than extra price. So much is this that it is entirely safe to conclude that there is something vitally wrong at the creamery that does not receive a good premium over the market.

On the other hand this practice of premiums makes it possible for swindlers to induce shipments of butter under promise of high premiums. Nearly every year some creamery manager is induced to ship to some unknown firm by reason of excessive premiums offered, and later is compelled to mourn the loss of the butter so shipped. Reliable commission houses easily show their responsibility by their ratings in the commercial agencies or by unquestionable bank references and it is only the incautious manager than can be deceived by the swindler.

## IOWA MANUFACTURES, DAIRY PRODUCTS SECOND.

The following table shows the relative importance of the manufacture of dairy products. The figures are from the United States Census department. The first three here given are the three chief manufactures of the State without regard to other classification. The five classes are selected from a table showing ten chief manufactures of Iowa.

## FIVE CHIEF MANUFACTURING INTERESTS OF IOWA—FOOD PRODUCTS

	Number of Establishments	Capital	Salaried Officials		Wage earners	Av. Number	Wages	Miscellaneous Expense	Value of Product	Average Value
			No.	Salaries						
Slaughtering and Meat Packing, wholesale.....	19	\$ 7,397,359	254	\$238,350.00	3,057	\$1,823,488	\$709,738	\$30,074,070		
Butter, Cheese and Condensed milk.....	1905	6,351,353	183	197,576.00	2,887	1,203,167	441,649	23,695,044		
Flour and Grist Mill Products.....	1905	2,638,639	808	142,779.00	1,180	685,287	869,497	15,134,027		22,071
Food Preparations.....	1905	2,458,017	413	81,425.00	1,153	568,653	153,960	12,099,468		17,478
Canning and Preserving Fruits and vegetables.....	1905	2,216,659	173	123,097.00	770	399,108	322,960	11,012,608		
	1905	4,946,914	172	123,996.00	942	434,097	244,308	6,934,724		
	1905	5,198,086	78	93,968.00	977	337,242	251,639	4,667,846		
	1905	2,740,021	69	68,970.00	784	256,031	228,144	2,778,804		
	1905	1,783,488	82	68,585.00	1,163	292,612	154,744	1,369,968		
	1905	1,097,221	46	27,303.00	699	184,710	68,186			

These figures note the decrease in number of butter, cheese and condensed milk factories from 1900 to 1905 from 907 factories to 657, with a decrease of capital employed of \$420,318. This sum is not nearly the loss of capital employed, because the changes in the creamery business have closed up many more than the apparent difference of 250 plants. That is, some of the present 657 are new plants and so more than 250 of the 907 have been closed. The average value of capital in 1900 was \$3,813, at which valuation, the capital invested in the 250 plants would amount to \$952,222. The fact that the new creameries now built are larger and have each more capital than was the case five years ago makes the apparent loss of capital appear as first stated. The real subtraction has been far in excess of the \$952,222, just as the real number of closed creameries exceeds 250. Probably 350 different creameries have been closed in the years 1900 to 1905 and a million dollars has been lost in unsalable buildings and machinery.

Notwithstanding the decrease in the number of plants, the number of "salaried officials" has been nearly doubled and the amount paid for salaries has increased in like proportion. The number of wage earners employed is practically the same. That is, notwithstanding the fact that the 657 plants now do nearly the same business as the 907 did in 1900 the number of wage earners has not been changed. But they receive more than \$100,000 more in wages than formerly. A comparison of the other items in the column of wages will show that there has been no corresponding increases of wages in other industries.

"Miscellaneous expenses" is an interesting item. It is evidently too small to include the hauling or other transportation of milk or cream, or freight or commission. The number given is too small to include tubs, and probably does not include such certain and uniform expenses as salt, color and coal, insurance or repairs or expenditures to replace wornout machinery. All of these items, with very small variations are proportioned to the amount of business, and if anything they should be smaller in 1905 than in 1900. Miscellaneous expenses must include various small items not classified above, and doubtless consists largely of the expense of running the business, of securing new patrons, or working up patronage at a distance from the creamery, perhaps of percentage of buyers of cream and their expenses. At any rate, in 1900 Iowa's 907 creameries each had \$169 miscellaneous expenses and they did a business averaging \$17,476. In 1905 we have 657 creameries

each with miscellaneous expenses of \$560 and they do an average business of \$23,071. The average "miscellaneous expenses" have increased more than 140 per cent.

Stated in another way, the 907 creameries did, in 1900, business amounting to \$15,846,077 with a total expense for salaries, wages, and miscellaneous of \$824,068. In 1905, the 657 creameries did a business amounting to \$15,138,027, nearly three-quarters of a million less than in 1900, at an expense for salaries, wages and miscellaneous of \$1,207,543.

The producer of the butter is vitally interested in changes in cost of manufacture for it affects the price he can get for his product. He now pays nearly \$400,000 more to have the state's butter manufactured than he did in 1900.

In the above analysis of the figures, the cheese and condensed milk factories are ignored, for the reason that their combined product is only about a third of a million of dollars and is practically the same now that it was in 1900; if there has been any change, the values are less now than formerly so that any changes in the aggregates must be fully charged to butter factories.

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### THE "WATER SEPARATOR."

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One of the causes of thin and poor cream is the so-called water "separator." Those factories that make any distinction between the different lots of cream offered them pay two cents less a pound for butter fat in "hand-skimmed or water separator" cream, for the reason that it is likely to be 24 hours older than hand separator cream, and so of poorer quality; and also is usually of low per cent and hence the freights on it are greater in proportion to its value in butter fat. Not only does the farmer get less price for his cream raised by the "water" method but he loses very much butter fat in the skimmed milk left by the method. If his water "separator" is of the dilution kind he also spoils his skimmed milk for feeding purposes by diluting it more than 50 per cent.

No deep setting system has yet been devised that is superior in results, either in quality of cream produced or closeness of skimming to the well-known submerged cans of the Cooley system. The Cooley

system went out of date twenty years ago because the power separator at the creamery would get out of the milk enough more butter fat than the Cooley system to pay the charge of ten or twelve cents a hundred pounds for hauling the milk and show a profit besides. Yet in the last two years hundreds of farmers have bought water "separators," inferior to the kinds discarded a score of years since.

The water dilution system is a kind of perennial humbug inflicted periodically upon the agricultural public for the exclusive and personal benefits of their makers and salesmen. The Iowa Dairy Commissioner's Report of 1899 denounces the dilution "separator" as a humbug and quotes from agricultural experiment stations as far back as 1890 to substantiate the statements made. The use of this system is wasteful in the extreme.

The farmer who will partition off one end of his stock tank, put a cover over it to exclude sun and dust, and arrange so that the water from his windmill runs through this part of the tank, has an ideal place to set his milk for hand skimming or to keep his milk or cream for delivery to the creamery. If he skims his milk by this plan he must be content to lose from one-sixth to one-fifth of the butter fat and to take a low price for the butter fat he sells.

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## CHANGES IN DAIRY LAWS.

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In order to prevent the spread of tuberculosis by means of the skimmed milk sent back to the farms by the creameries it is suggested that a law be enacted requiring creameries to heat the skimmed milk to 180 degrees before returning it to the farmers. Pasteurization of the skimmed milk would doubtless result in a smaller amount of tuberculosis among the hogs and calves that consume the skimmed milk. It can be effected at the creameries at very slight cost and a law of this kind would only make compulsory a practice that is already followed by a large number of the milk receiving creameries of the State.

The statutes referring to adulteration of milk and cream were enacted in the present form a number of years ago. Since their enactment not only has the sale of cream to creameries increased to an extraordinary extent but the sale of sweet cream for immediate consumption is increasing very rapidly. The statutes should be amended in such a way as to make certain that the restrictions in regard to sale of adulter-

ated milk apply also and in the same manner to sales of adulterated cream.

The same statutes provide for the punishment of one who sells "unwholesome" milk or cream. There seems to be no law providing penalties for receiving or buying such cream for butter making purposes. That is to say the man who sells "unwholesome" cream may be fined twenty-five to one hundred dollars for his offense, but there is no way to punish the person who buys the cream, makes it into butter and puts this product on the market.

This state has a very strong statute requiring that the apparatus used in the Babcock test shall be efficient and accurate, and under this statute this department has induced the use of scales for weighing the cream samples for testing by general notice of intention to make prosecutions if the cream was not so weighed for testing. But under this statute it is impossible to control manipulation of the test. Accusations and complaints of both lowering the test and raising it are not only common but increasingly so. Lowering of the test might be reached under the general statutes of the State in regard to cheating but some specific statute is needed to cover manipulations of the test in the other direction. Manipulating the test has for its object the deception of the seller of the product tested whether the test is raised or lowered and the laws should provide punishment for the offense.

The shippers of cream complain that not only are their cans used for other purposes than carrying of cream but that they have considerable losses of cans. Other states where milk and cream are largely shipped by rail have laws covering both situations. In Iowa the shipping of milk and cream has developed in the last two or three years and no specific laws are found on the statute books sufficient to meet the present conditions. The situations complained of are sufficiently serious to warrant new laws covering them.

## ASSISTANT DAIRY COMMISSIONERS.

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The demands for expert advice and assistance among the creameries are more than this office can meet with the force at command. A growing interest in scientific management of creameries and advanced and improved methods of butter making require instruction that the buttermaker can scarcely secure otherwise than at his own creamery while carrying on his work. Hence the work of the assistant commissioners at the creameries has been productive of much improvement of methods and quality of butter made and hence of profits to the factory. Four hundred and fifty-six visits have been made by them to creameries in fifteen months to November 1, 1905. A very few creameries have been found in unsanitary conditions and the management has been given the choice between a thorough renovation of the plant or facing a criminal charge in court. The number of creameries to be visited is so great in proportion to the number of inspectors that it is difficult to make sure that the suggestions are carried out but usually the directions to clean up are followed very promptly.

A good deal of unclean cream and milk has been rejected at the creameries under that section of the statute which forbids the delivery to a creamery of "unwholesome milk or cream." No prosecutions have been brought under this statute for the reason that the delivery of unfit milk and cream is an offense to which the receiver is often a party just as much as the one who delivers. The law would reach only the one who deliveries the unfit material.

The chief service of the assistants among the creameries is in the direction of inducing the adoption and practice of improved methods of butter making. More than half the creameries of the state are co-operative creameries, and are under the management of men whose knowledge of butter making is extremely limited. It often happens that the buttermaker is not able to induce the management to allow him proper appliances for use in carrying out plans and methods that are now considered essential to best results. Under such circumstances the efforts of the assistants are of service in pointing out what are the successful methods and appliances indispensable to them.

INSPECTION OF MILK.

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The inspection of milk offered for sale in the fourteen cities of the State having ten thousand population or more is confined to inspection to determine the butter fat contents and to determine whether preservatives have been added. It is not possible with the force and money at the service of this department to make inspection of the sanitary conditions of the cows from which the milk is produced nor the conditions in which they are kept. Such an inspection would be valuable.

The inspection that is made shows that comparatively little milk or cream low in percentage of butter fat is sold. The watering and skimming of milk is not practiced to any alarming extent. The fact that watering or skimming to the point that would make a profit worth while shows at once in the quality makes it poor policy to practice this form of adulteration, and the milkman who expects to remain in the business, and whose reputation is therefore a part of his stock in trade, finds that he cannot afford to do other than sell good milk. The use of preservatives is not so certain to be detected or to be the source of complaint by the patrons. In a good many cases the patron seems to think the milk ought to keep without ice for several days after delivery and complains if it does not, so that the dealer is constantly importuned to furnish milk with superior keeping qualities and of course the easy and cheap method to secure this result is to use a chemical preservative. Formaldehyde is the favorite preservative in use among milkmen for the reason that it is a liquid, easily used, and is cheap, and then it is advertised too under attractive trade names with the assurance that no chemist can detect its presence in the milk. The successful prosecutions maintained by this office is quite conclusive of this claim.

There is a growing tendency among milkmen to have good wagons, to sell their milk in bottles, and to get a higher price than formerly. The cities of Des Moines and Cedar Rapids now have pasteurized milk plants, and each year natural causes have brought about better conditions among milk dealers..

The growth of the city milk inspection in this State is indicated by the following table showing the number of permits for milk dealers issued in the years from 1895 to 1905. The years end in every case on the 4th of July:

1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
491	568	620	574	676	714	784	821	783	780	827

The milk inspection carried on under the direction of this department affects about one-seventh of the population of the State, as will be seen by the following table:

Cities	Population	Inspectors
Burlington.....	23,201	Dr. W. C. Hummell
Cedar Rapids.....	25,656	Dr. J. W. Griffith
Clinton.....	22,698	P. S. Bannister
Council Bluffs.....	25,802	H. A. Lennox
Davenport.....	35,254	H. J. High
Des Moines.....	62,139	Ray Johnson
Dubuque.....	36,297	Dr. Charles Palen
Fort Dodge.....	12,162	D. C. Benjamin
Keokuk.....	14,441	A. A. Bland
Marshalltown.....	11,844	Dr. E. M. Singleton
Muscatine.....	14,073	Dr. John Tillie
Ottumwa.....	18,197	E. B. Hill
Sioux City.....	33,111	J. E. Huffman
Waterloo.....	12,580	Theo. Peek
Total.....	347,355	

Complaints have been made to this office of the quality of milk sold in several of the smaller cities and towns of the State and some investigations have been made but no alarming conditions have been found to exist.

## FARMERS' INSTITUTE MEETINGS.

For several years this department has furnished speakers for farmers' institute meetings and similar occasions. A large number of creameries have been induced to organize meetings of their patrons for the purpose of discussing their interests and the dairy business as affecting their immediate localities. During the past twelve months this office has given assistance at nearly seventy such meetings. The professor of dairying at the State College at Ames and his assistants, the president of the state dairy association, and several other gentlemen not so directly connected with the dairy business have also rendered good service to the dairymen of the State in the same manner.

For a good many years the reports of this office have suggested that more attention be given to such meetings as here mentioned,

and have pointed out the good results likely to follow for the dairy business. In this state about all the dairy industry centers about the creameries. No other business of any kind could have been so permanent and successful under such adverse conditions, with so little thought and attention given to it. It is easy to believe that study and discussion and combined effort would bring from the business larger and more profitable returns. The meetings held have been quite popular for the reason that changing conditions of agriculture have compelled the attention of the farmer to dairying, to the better methods of dairying, so that there is a real demand for information as to how greater profits may be obtained from the business.

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### AVERAGE WAGES OF BUTTER MAKERS.

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Reports of monthly wages paid 468 buttermakers of the State show an average of \$62 per month. Wages run as high as \$150 per month. Very few creameries now operate less than full time and no doubt the average amount received yearly by the buttermakers of the state is fully \$725 to \$750, a total for the State of \$400,000.

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### CHEESE FACTORIES AND THEIR PRODUCT.

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The cheese factories of the State now number twenty-nine and reports have been received from twenty-five of these. Only five of these make as much as 100,000 pounds of cheese, and but one makes as much as 200,000 pounds. The total amount of cheese made is 1,575,646 pounds and practically all of it is sold and consumed in the State. It is an anomalous situation that the greatest dairy state in the west must import all but a small part of the cheese consumed, but the fact remains that the farmers of this State have never taken kindly to the cheese making and cheese factories are only possible under exceptionally favorable conditions.

## TWELVE MONTHS' SCORING.

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The value of butter depends largely upon its quality, or technically speaking, the score. The estimate put upon it by the butter judge very often points out the defects in the manner and methods of manufacture and how to remedy them. Beginning with March this department has held at Mason City each month a scoring of butter to which the buttermakers of the State were urged to send their butter for scoring and criticism. The number of entries has varied from 58 to 115. Not only is the butter scored and full criticism made and sent to the buttermaker, but the assistant commissioners have personally visited the creameries from which the entries have come with a view of improving conditions and methods. The results obtained have been gratifying and valuable, but might be much more so if a larger number of the creameries could be induced to participate. The work of the assistant commissioners has been much more intelligently directed by reason of the knowledge gained of the butter made in the creameries. By this means they have been able to spend their time among those creameries where the possibilities of improvement were the most obvious, and have not wasted any time with those that are already successful to the highest degree.

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## QUALITY OF CREAM AND BUTTER.

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The quality of milk and cream and its relation to the quality of butter to be made from the same and the price to be obtained for the finished product are of such obvious relation and importance that continual efforts are made to improve the quality, not only by adoption of better methods of manufacture, but by improving the quality of the material from which the butter is to be made. Three-fifths of the butter made in our creameries is made from cream skimmed on the farm. Since the adoption of the hand separator the quality of cream delivered at the creameries has very materially lowered. At the suggestion of numerous creamery operators the dairy commissioner early in the year sent out a card, of which a copy follows, with a suggestion that the same be reprinted for distribution among the patrons, a suggestion that was followed by a large number of creameries.

### GOOD BUTTER

**CAN BE MADE ONLY FROM CLEAN, SWEET CREAM.**

The following suggestions are made in the hope that they will assist in securing better grades of cream from creamery patrons and so reduce present losses to the farmer resulting from low quality cream and butter:

The farm separator must be washed after each time it is used.

Wash the separator and other dairy utensils with a BRUSH and plenty of washing powder. Rinse with hot water. Don't use a cloth.

Skim a cream of 30 to 35 per cent test.

Immediately after separation cool the cream to the lowest possible temperature, 50 degrees or lower.

Never mix warm cream with cold cream. Before mixing, cool the freshly separated cream to the same temperature as that of the cream to which it is added.

Always keep cream cans in cold water, summer and winter.

Don't cover the cans till the cream is cooled. Then keep them closed.

Don't allow cream to freeze. It lessens its value and may interfere with accurate testing.

Deliver cream as often as possible, daily in summer and every other day in winter.

Persuade your creamery to adopt and *enforce* rules for the handling of cream.

Des Moines, Iowa, Feb. 10, 1905.

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### OLEOMARGARINE.

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If the oleomargarine question were no greater elsewhere than it is in Iowa it would call for no comment whatever or attention from any dairymen, but unfortunately it is a persistent evil in those parts of the country where its sale is made possible conditions there existing. There has never been any great demand or sale of oleomargarine in our State because the conditions were not such as to make the sale of it profitable. In addition to this fact this State has the best oleomargarine statute in the United States, a statute forbidding the sale of oleomargarine "having a yellow color." As set forth in last year's report the decision of our supreme court in the case of the State of Iowa against the Armour Packing Co. had the effect of putting out of business nearly all the dealers in the so-called uncolored product, which nevertheless had a slight "yellow color." The fact must not be lost sight of that under the present United States laws, a license permitting the sale of "uncolored" oleomargarine costs the dealer but \$6 and as he usually takes out the license late in the fall or early winter he actually only pays \$4 or \$4.50 for the balance of the year ending June 30th. The license fee is so small that large numbers are induced to

try the business, and if there were a real *bona fide* demand for oleomargarine the figures given below would show an increased production instead of the reverse. The fact is that there is slight demand for oleomargarine and when it is sold for exactly what it is the consumption is relatively small. Since all oleomargarine pays a tax the figures given below are absolutely accurate and come from the Internal Revenue office. The production and sale of oleomargarine for the last six years has been as follows:

## UNDER THE NEW LAW.

1905 .....	49,880,982
1904 .....	48,071,480
1903½ .....	71,804,102

## UNDER THE OLD LAW.

1902 .....	126,316,472
1901 .....	104,943,856
1900 .....	107,045,028

The oleomargarine business, so far as its manufacture is concerned, unlike the dairy business is in the hands of a very few men, mostly the great meat packers and their immediate friends. They will not easily give up a business of such great profit and they will without the slightest doubt, in the immediate future as they have in the past, use every means that self-interest can devise or unlimited money can secure to weaken or even to repeal the law. They have powerful friends in high places. If the dairymen are too fully satisfied with the victory that has been won for pure butter and honest dealing they will wake up some day and discover that they have deceived themselves. Self-interest still requires that we be on guard. The National Dairy Union and its officials are doing everything in their power to prevent possible steps in the direction of undoing the work that has been accomplished and those interested in dairying everywhere should assist this organization in this work.

## RENOVATED BUTTER.

## LIST OF RENOVATED BUTTER FACTORIES.

County	Location	Firm Name	Postoffice Address
1 Calhoun .....	Rockwell City .....	Andrew Wood Co. ....	Rockwell City
2 Clayton .....	McGregor .....	The J. D. Bickel Produce Co	McGregor.
3 Des Moines .....	Burlington .....	Iowa Grain and Produce Co	Burlington
4 Lee .....	Keokuk .....	Iowa Pure Butter Co ..	Keokuk
5 Polk .....	Des Moines .....	E. M. Ellingson & Co. ....	Des Moines
6 Polk .....	Des Moines .....	Schermmerhorn-Shotwell Co.	Des Moines
7 Polk .....	Des Moines .....	McRae Bros .....	Des Moines
8 Wayne .....	Humeston .....	James L. Humphrey, Jr. ....	Humeston
9 Woodbury .....	Sioux City .....	N. R. Hathaway .....	Sioux City

The above list of renovated butter factories shows a decrease of three from the list of last year's report. The stock from which the number of pounds given below is made is collected from all parts of the middle west. There are more renovating factories in Iowa than in all the rest of the country west of the Mississippi river. There is a tendency to concentrate the business in the hands of a few men and a few factories.

Renovated Butter	Year ending July 1, 1902—reports from nine factories	Year ending July 1, 1903—reports from thirteen factories	Year ending July 1, 1904—reports from twelve factories	Year ending July 1, 1905—reports from nine factories
Pounds of Renovated butter made.....	4,530,388	9,193,450	8,827,543	10,317,484
Average per factory.....	503,376	707,188	735,628	1,146,389
Sold for consumption in Iowa.....	991,333	2,168,276	958,626	1,356,304
Shipped outside the State.....	3,539,055	7,025,174	869,917	8,961,180

SHOWING AVERAGE MONTHLY PRICE OF FANCY WESTERN CREAMERY BUTTER IN NEW YORK MARKET.

Month	Twelve months ending Nov. 1, 1896.	Twelve months ending Nov. 1, 1897.	Twelve months ending Nov. 1, 1898.	Twelve months ending Nov. 1, 1899.	Twelve months ending Nov. 1, 1900.	Twelve months ending Nov. 1, 1901.	Twelve months ending Nov. 1, 1902.	Twelve months ending Nov. 1, 1903.	Twelve months ending Nov. 1, 1904.	Twelve months ending Nov. 1, 1905.
November.....	\$ .2320	\$ .2112	\$ .2325	\$ .2337	\$ .2600	\$ .2497	\$ .2412	\$ .2650	\$ .2317	\$ .2481
December.....	.2500	.2250	.2290	.2160	.2720	.2540	.2510	.2920	.2423	.2638
January.....	.2366	.1900	.2040	.1975	.2650	.2262	.2425	.2762	.2270	.2910
February.....	.2000	.2050	.2042	.2100	.2500	.2250	.2562	.2660	.2317	.2918
March.....	.2185	.1900	.1937	.2075	.2350	.2212	.2840	.2860	.2452	.2907
April.....	.1850	.1840	.1980	.1962	.1960	.2099	.2325	.2725	.2294	.3006
May.....	.1572	.1530	.1540	.1790	.2012	.1901	.2275	.2300	.2012	.2371
June.....	.1550	.1500	.1687	.1881	.1950	.1925	.2194	.2160	.1803	.2049
July.....	.1505	.1500	.1687	.1935	.1960	.1960	.2131	.2012	.1767	.2056
August.....	.1571	.1675	.1860	.2000	.2100	.2050	.1990	.1940	.1793	.2111
September.....	.1600	.1930	.2025	.2262	.2150	.2110	.2170	.2075	.1947	.2064
October.....	.1850	.2290	.2235	.2400	.2190	.2200	.2362	.2100	.2095	.2184
Average per lb. for each year.	\$ .1882	\$ .1885	\$ .1971	\$ .2065	\$ .2278	\$ .2165	\$ .2416	\$ .2417	\$ .2140	\$ .2467

On account of "premiums" now almost universally received by the makers of firsts and extras, amounting to from one-half a cent to two cents more than the published market prices, the real price received by the creameries is probably a full cent a pound more than the above averages computed from the official daily prices of butter for the last twelve months.

## BUTTER PRODUCTION OF THE STATE FOR SIX YEARS.

	1900.	1901.	1902.	1903.	1904	1905
Average pounds of butter per creamery .....	104,918	105,491	104,152	97,770*	112,084	118,000
Total pounds of butter for all creameries .....	84,963,062	82,706,944	77,885,686	64,565,970	70,000,000	827,075.88

\*In 1904 figures for average the amount made in nine centralizing creameries is not included, but the aggregate is included in the total.

†In 1905 figures for average the amount of butter made in 20 centralizing plants is not included but the aggregate is included in the total.

## PROSECUTIONS.

Fourteen persons have been convicted and fined for the sale of adulterated milk during the past year. In each case except one the fine imposed was \$25 and costs; the defendant in the one case having been fined \$100 and costs. These cases were brought in the following cities: Ottumwa, 2; Council Bluffs, 3; Davenport, 6; Sioux City, 3.

Besides the above mentioned prosecutions there are now pending in justice court in Council Bluffs one case for the sale of adulterated milk and one case for the sale of adulterated cream.

In a case brought against a Des Moines dairyman, he was convicted before a local justice and fined \$100 and upon appeal to the district court was discharged, as not guilty, by the jury.

In all of these cases the offense consisted in selling milk containing formaldehyde.

Prosecutions of this kind are hampered by the fact that it is not easy to get the services of a competent chemist.

In the city of Davenport the association of physicians selected one of their number, who made a very large number of analyses of milk, and upon his findings the six cases mentioned above were brought. Five of these cases were brought at one time and the accused persons plead guilty, with the explanation that they had not added anything to the milk directly, but had used a liquid preparation for the purpose of disinfecting their cans after washing and suggested that the formaldehyde found by the chemist got into the milk in that fashion. For this reason the justice assessed the minimum fine of \$25, with a severe

warning for future good behavior. Inside of a month one of the same parties was again arrested and tried and found guilty of selling milk containing formaldehyde, at which time a fine of \$100 was assessed.

TABLE NO. 1

## COMPARISONS.

	1897	1898	1899	1900	1901	1902	1903	1904	1905
Total No. of creameries and skim stations.....	891	954	967	994	960	919	792	691	655
<b>OWNERSHIP.</b>									
Individual .....	504	516	501	524	497	377	306	242	206
Co-operative .....	349	349	349	394	360	376	350	335	316
Stock company .....	37	88	116	195	102	165	135	113	132
State property .....	1	1	1	1	1	1	1	1	1
<b>PLAN OF OPERATION</b>									
Separator .....	---	---	842	853	772	748	538	293	193
Gathered cream .....	---	---	71	85	98	105	119	85	106
Combined plant .....	---	---	50	56	96	65	135	243	262
* Exclusive hand separator .....	---	---	---	---	---	---	---	70	94
<b>BASIS OF RECEIVING MILK OR CREAM.</b>									
By the test .....	---	---	849	896	890	882	748	672	651
By weight or measure .....	---	---	110	98	70	57	44	19	4
<b>CREAMERY CHANGES.</b>									
Number of new creameries .....	138	90	56	87	35	34	25	10	48
Number of new skim stations .....	43	36	34	34	18	22	16	9	48
Number of plants closed .....	55	53	79	75	87	97	160	120	74

\*Before 1904 hand separator creameries were included as gathered cream plants  
In 1905 twenty-seven skim stations closed; in 1904 forty-four skim stations closed.

TABLE NO. 1.  
NUMBER OF CREAMERIES AND CHANGES.

Counties.	No. of creameries	No. skim stations	No. of creameries closed	No. of skim stations closed.	New Plants
THE STATE.....	568	87	47	27	40
Adair.....	8	1	2		
Adams.....	2		1	3	
Allamakee.....	8				1
Appanoose.....					
Audubon.....	9				
Benton.....	5				1
Black Hawk.....	17				1
Boone.....	2		1	1	
Bremer.....	21				1
Buchanan.....	9	5			
Buena Vista.....	5				1
Butler.....	19	2		1	3
Calhoun.....	6				
Carroll.....	8	1			
Cass.....	2		1		
Cedar.....	4	1	3	2	
Cerro Gordo.....	6		1		1
Cherokee.....	4		1		1
Chickasaw.....	15	5		1	3
Clarke.....					
Clay.....	6				
Clayton.....	15		2	3	
Clinton.....	7	4	1		
Crawford.....	1		1		
Dallas.....	4	1	1	4	
Davis.....	4			1	
Decatur.....	1	4			
Delaware.....	24	1		1	
Des Moines.....					
Dickinson.....	5				1
Dubuque.....	24		1		3
Emmett.....	8				
Fayette.....	20				2
Floyd.....	5				
Franklin.....	6	1	2		
Fremont.....					
Greene.....	2				
Grundy.....	7		1		
Guthrie.....	10		1		
Hamilton.....	4	3	2		
Hancock.....	7	1	1	1	
Hardin.....	10	2	2		
Harrison.....	1		1		
Henry.....					
Howard.....	8	1			
Humboldt.....	11		1		1
Ida.....	2				
Iowa.....	7	2			
Jackson.....	14	4			2
Jasper.....	3				
Jefferson.....	3	1	1		1
Johnson.....	1				
Jones.....	15	10			2
Keokuk.....		3	1		1
Kossuth.....	21				
Lee.....	1				1
Linn.....	16	3	3		1
Louisa.....					
Lucas.....		1			
Lyon.....	2				
Madison.....				1	
Mahaska.....	2				
Marion.....	1	1			1
Marshall.....	5				1
Mills.....		2		1	
Mitchell.....	9		1		

TABLE NO. 1—(CONTINUED.)

Counties	No. of creameries	No. of skim stations.	No. of creameries closed.	No. skim stations closed.	New Plants
Monona.....	1				
Monroe.....	1				
Montgomery.....	2				
Muscatine.....	5				
O'Brien.....	3				
Osceola.....	1				1
Page.....					
Palo Alto.....	14			1	
Plymouth.....	3	2			
Pocahontas.....	1	1	1		
Polk.....	5	3	2		
Pottawattamie.....	8	3	1		
Poweshiek.....	4	2	1	1	2
Ringgold.....					
Sac.....	8				
Scott.....	2	1			
Shelby.....	5	1			
Sioux.....	7	1			3
Story.....	8			2	
Tama.....	4				
Taylor.....	3				1
Union.....	1		1		
Van Buren.....		3			
Vapeilo.....	2				
Warren.....			1		
Washington.....	1		2		
Wayne.....	1	2			
Webster.....	2		1		
Winnebago.....	9	5		2	1
Winneshiek.....	13		1	1	
Woodbury.....	2				
Worth.....	9	1	2		1
Wright.....	4		2		
The State.....	508	87	47	27	40

It is impossible to estimate the total number of creamery patrons and total number of cows with any accuracy, for the reason that the larger plants report a very large number of patrons in proportion to the amount of butter that they make. This no doubt arises from the fact that their patronage is shifting and their lists in the course of a year will carry twice as many names as their actual number of patrons on the average. Thus, some names would appear on the lists of other creameries and hence, in a complete report, would be counted twice. There is no way to estimate what proportion of duplications of this kind occur.

Neither is it easy to estimate the number of cows, because the centralizers have no means of knowing how many cows their patrons have, and there is no way to estimate how many cows it takes to make the enormous quantities of butter there is made in these plants.

There are, perhaps, 85,000 creamery patrons and 600,000 cows tributary to the 368 creameries of the State of Iowa.

TABLE NO. 2.

TABLE SHOWING NUMBER OF PATRONS, COWS, CREAMERIES USING COMMERCIAL STARTER AND ACID TEST, CREAMERIES THAT PASTEURIZE THE SKIMMED MILK AND CREAMERIES THAT USE A SKIMMED MILK WEIGHER.

Counties	No. of creameries reporting.	No. of patrons reported.	No. of creameries reporting number of cows.	No. of cows reported.	No. of creameries using commercial starter.	No. of creameries using test for acidity of cream.	No. of creameries pasteurizing skimmed milk.	Using skimmed milk weigher
The State.....	483	82,031	355	367,368	238	218	195	208
Adair.....	4	788	2	2,520	2	2		1
Adams.....	2	186	2	1,225	2		1	2
Allamakee.....	7	1,564	5	7,300	1	4		
Audubon.....	8	1,054	8	9,136	6	2	5	2
Benton.....	3	356	1	840	1	1		
Black Hawk.....	16	2,074	12	11,410	9	10	10	10
Boone.....	2	186	1	600	1	1	2	1
Bremer.....	20	1,494	14	10,998	9	10	4	12
Buchanan.....	9	1,626	3	4,499	6	4	5	3
Buena Vista.....	5	817	3	2,823	1	1	1	
Butler.....	17	2,014	9	6,208	5	5	7	10
Calhoun.....	5	1,583	2	2,715	2	2	1	2
Carroll.....	6	2,276	4	1,487	4	3	1	5
Cass.....	2	180	2	1,350			1	
Cedar.....	4	412	4	2,405				1
Cerro Gordo.....	4	1,542	3	2,240	1	1	1	
Cherokee.....	3	298	3	1,800	1	1	1	
Chickasaw.....	15	2,475	9	10,499	4	6	5	6
Clay.....	5	575	3	3,500	5	4	4	1
Clayton.....	14	3,177	11	21,000	7	5	2	
Clinton.....	2	111	2	945	7	6	7	2
Crawford.....	1	1,500			1	1		
Dallas.....	3	407	1	950	2	1	2	
Davis.....								
Delaware.....	24	2,055	21	25,387	19	12	16	12
Dickinson.....	5	524	4	2,575	3	2	2	2
Dubuque.....	20	2,305	13	11,800	7	8	2	3
Emmet.....	6	364	6	3,481		1	4	
Fayette.....	20	2,548	15	20,584	9	10	13	7
Floyd.....	5	1,193	3	4,646	2	2		
Franklin.....	5	1,780	5	4,830	2	2	2	2
Fremont.....								
Greene.....								
Grundy.....	6	784	5	6,475	5	5	2	5
Guthrie.....	9	1,431	7	6,666	7	3	5	6
Hamilton.....	4	686	4	5,535	2	4	2	
Hancock.....	7	882	7	9,155	2	3	1	
Hardin.....	10	1,314	8	8,923	5	6	6	8
Harrison.....	1	75	1	430	1	1	1	1
Henry.....								
Howard.....	8	1,186	6	7,432	1	3	2	2
Humboldt.....	9	839	7	5,865	4	3	5	8
Ia.....	2	233	2	1,700	1	1		
Iowa.....	7	789	6	4,079	4	3	2	7
Jackson.....	9	1,046	6	4,023	5	8	5	5
Jasper.....	2	179	1	800	1	1	1	1
Jefferson.....	1	80	1	700	1	1		1
Johnson.....								
Jones.....	13	1,802	6	6,942	5	3	0	8

TABLE NO. 2—CONTINUED.

Counties.	No. of creameries reporting.	No. of patrons reported.	No. of creameries reporting number of cows.	No. of cows reported.	No. of creameries using commercial starter.	No. of creameries using test acidity of cream.	No. of creameries that pasteurize skimmed milk.	Using skimmed milk whey.
Keokuk.....	21	626	17	12,272	8	4	13	15
Kossuth.....	12	1,519	8	6,010	8	6	5	7
Lee.....	2	300	2	1,800	1	1		1
Linn.....	1	400	1	1,900	1			
Louisa.....	9	1,928	7	11,961	1	4	1	
Lucas.....	1	67	1	500				
Lyon.....	1	85	1	665			1	
Madison.....	1	135	1	600				
Mahaska.....	5	920	3	3,840	3	4		2
Marion.....	2	595	1	1,500	1	1	1	
Marshall.....	14	1,303	14	10,540	7	1	7	13
Mills.....	3	386	3	1,754	1	4		2
Mitchell.....	2	359			1	1		1
Monona.....	5	6,114	1	400	4	3	1	
Monroe.....	3	703	1	650	4	3	3	1
Montgomery.....					3	2	2	
Muscatine.....								
O'Brien.....	8	785	6	4,290		1		
Osceola.....	8	810	6	3,696	3		1	
Page.....	5	1,172	6	10,578	3	3		
Palo Alto.....	7	1,014	6	5,925	2	8	4	5
Plymouth.....	2	103	2	1,454	2	2	2	
Pocahontas.....	2	1,180			1	1		
Polk.....								
Pottawattamie.....								
Poweshiek.....								
Ringgold.....								
Sac.....								
Scott.....								
Shelby.....								
Sioux.....								
Story.....								
Tama.....								
Taylor.....								
Union.....								
Van Buren.....								
Wapello.....	1	70	1	500	1	1	2	1
Warren.....	1	54						
Washington.....								
Wayne.....								
Webster.....	3	713	1	400	1	1		
Winnebago.....	3	1,184	6	7,607	3	5	6	5
Winneshiek.....	18	2,827	9	17,418	1	2		
Woodbury.....	2	7,000	1	8,000	2			
Worth.....	6	809	3	5,630	5	5	6	2
Wright.....	4	632	2	3,300		1		
The State.....	482	63,031	365	367,368	226	218	195	208

## HAND SEPARATORS.

The total number of hand separators given in the foregoing table is doubtless too large, for the reason that the number of patrons, and likewise, the number of hand separators used, as reported from the centralizing plants evidently carry a good many duplications, because of the shifting character of the patronage of the various centralizing plants, and for that reason the number 49,130 hand separators reported is perhaps five to seven thousand too large. The fact remains, however, that fully one-half the butter of the State is made from cream skimmed by hand separators. Not only the twenty centralizing plants of the State, but seventy-one others, receive practically nothing but hand separator cream, and a total of seventy-six plants are receiving cream shipped by rail. The managers of certain of the smaller creameries have been enterprising enough to get into territory other than their own and induce the shipment of cream to them, rather than to the larger centralizers, a plan which every creamery ought to follow if it has easy access to a territory not already covered by a local creamery.

TABLE No. 3.

Counties.	No. of creameries reporting hand separators.	Hand separators reported.	No. of exclusive hand separator creameries.	No. receiving cream by rail.
The State .....	268	49130	94	76
Adair .....	3	422	—	1
Adams .....	1	95	—	—
Allamakee .....	7	1026	1	—
Audubon .....	5	500	1	—
Benton .....	3	320	3	1
Black Hawk .....	10	895	1	1
Boone .....	2	10	—	—
Bremer .....	1	12	—	—
Buchanan .....	6	194	1	—
Buena Vista .....	5	723	3	—
Butler .....	9	107	1	1
Calhoun .....	5	920	1	1
Carroll .....	6	2198	3	3
Cass .....	2	117	1	—
Cedar .....	4	76	—	1
Cerro Gordo .....	4	1125	1	1
Cherokee .....	3	187	3	2
Chicasaw .....	11	941	—	3
Clay .....	5	221	2	3
Clayton .....	13	2121	4	3
Clinton .....	1	7	—	—
Crawford .....	1	1500	1	1
Davis .....	—	—	—	—

TABLE NO. 2—CONTINUED.

Counties	No. of creameries reporting hand separators.	Hand separators reported.	No. of exclusive hand separator creameries.	No. receiving cream by rail.
Dallas	4	328		
Decatur			3	
Deleware	10	302	2	1
Dickinson	4	285	6	
Dubuque	12	1432	1	2
Emmet	5	143	1	1
Fayette	7	400	2	1
Floyd	4	518		
Franklin	5	643		2
Fremont				
Greene	1	6	1	1
Grundy	5	127	1	
Guthrie	10	406		
Hamilton	4	187		1
Hancock	7	680	4	2
Hardin	6	416		2
Harrison	1	20		
Henry				
Howard	5	224		
Humboldt	8	850		
Ida	2	220	2	
Iowa	5	161		
Jackson	8	770	2	1
Jasper	2	22		
Jefferson			1	
Johnson	11	80		
Jones	12	545		1
Keokuk				
Kossuth	18	551		
Lee			1	1
Linn	10	523	2	2
Louisa				
Lucas				
Lyon	2	225		
Madison				
Mahaska				1
Marion	1	150		1
Marshall				1
Mills				
Mitchell	7	324	1	
Monona	1	45		
Monroe	1	46		1
Montgomery				
Muscatine	1	25		
O'Brien	5	700	1	2
Osceola	2	425	1	1
Page	1	1908	1	1
Palo Alto	8	119		
Plymouth	2	167	1	
Pocahontas	2	230	2	1
Polk	5	6,013	4	4
Pottawattamie	2	440	1	2
Poweshiek	1	250		
Ringgold				
Sac	7	427	2	
Scott	1	69	1	1
Shelby	5	440	5	1
Sioux	6	1,776	5	2
Story	4	118		

TABLE NO. 3—CONTINUED.

Tama.....	2	152	1	1
Taylor.....	2	1,240	2	2
Union.....	1	750	1	1
Van Buren.....				
Wapello.....	1	3		1
Warren.....	1	2		
Washington.....				
Wayne.....			1	1
Webster.....	1	600	1	1
Winnebago.....	5	183	1	
Winneshiek.....	13	959	1	2
Woodbury.....	2	6,800	2	2
Worth.....	6	291		
Wright.....	4	554	2	1
The State.....	268	49,130	91	76

## FOR THE YEAR ENDING JULY 1, 1905.

506 creameries make.....	75,345,028 pounds
20 centralizing creameries included make,.....	17,627,108 pounds
486 creameries, not centralizers, make.....	57,717,920 pounds
an average of 118,000 pounds for the local creameries of the state.	
On this average, the 548 creameries, other than the twenty centralizers mentioned above, make..	65,080,480 pounds
20 centralizers of the state make,.....	17,627,108 pounds
Total creamery butter made in the state, 568 plants, which is the largest amount of creamery made butter ever reported.	82,707,588 pounds
The average price of butter for the twelve months in which the above amount of butter was made was 24.28 cents, New York Extras.	
At this value the 82,707,588 pounds of butter had an aggregate value of.....	\$20,081,000
For the next preceding twelve months the creameries of the state made 70,000,000 pounds of butter and the average price was 21.83, and the aggregate value was.....	15,281,000
Increase in value.....	\$4,800,000

The table herewith shows that from 736,373,890 pounds of milk and 141,369,998 pounds of cream, 75,345,028 pounds of butter have been made. It takes approximately 23 pounds of milk, or a little more than 3 pounds of cream to make a pound of butter. On this basis the pounds of milk given would make approximately 30,000,000 pounds of butter and the pounds of cream given would make 45,000,000 pounds of butter. From these figures, it is seen that three-fifths of the butter of the State is made from gathered cream, largely, of course, hand separator cream.

TABLE NO. 4.

TABLE SHOWING NUMBER OF POUNDS OF MILK RECEIVED, NUMBER OF POUNDS OF CREAM RECEIVED, POUNDS OF BUTTER MADE, POUNDS SOLD TO PATRONS IN IOWA AND SHIPPED OUTSIDE THE STATE, SO FAR AS REPORTED BY THE CREAMERIES.

Counties.	Number Reporting	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, and Market for Same.			
				Pounds of butter made.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the state.
THE STATE.....	506	736,373,890	141,369,998	75,345,028	3,292,428	3,229,009	66,812,997
Adair.....	3	4,374,000	1,480,000	678,835	21,858	11,432	645,545
Adams.....	7	1,720,000	187,803	105,881	1,910	9,750	94,221
Allamakee.....	7	1,929,000	4,453,520	1,361,102	19,368	36,415	1,305,419
Appanoose.....	8	17,466,251	1,296,071	1,291,211	31,884	8,040	1,291,537
Audubon.....	3	31,086,401	1,242,000	842,000	4,400	311,766	337,000
Benton.....	15	3,934,214	3,080,290	2,227,458	153,949	11,380	1,761,766
Black Hawk.....	2	55,858,344	19,677	180,086	10,172	158,614	158,614
Boone.....	21	82,386,181	519,869	3,399,738	204,974	124,419	2,070,343
Bremer.....	8	1,852,911	1,864,221	1,619,467	154,224	25,209	1,437,044
Buchanan.....	17	39,873,101	651,000	697,900	23,342	7,711	686,847
Buena Vista.....	17	39,873,101	651,000	1,893,879	162,294	58,439	1,682,796
Butler.....	4	1,807,968	1,922,554	728,044	4,542	13,501	711,061
Calhoun.....	7	4,823,587	3,809,746	1,825,801	9,905	2,276	1,313,650
Carroll.....	2	893,026	305,621	186,966	378	6,867	129,621
Cass.....	4	1,869,000	544,500	215,410	5,963	49,477	166,000
Cedar.....	4	1,000,000	2,637,800	855,200	29,600	13,750	311,369
Cerro Gordo.....	3	780,000	474,300	193,400	1,300	300	171,400
Cherokee.....	15	32,762,300	4,366,910	2,596,190	158,751	44,326	2,893,104
Chickasaw.....	6	7,748,000	944,400	632,200	39,720	2,304	600,676
Clarke.....	14	15,627,800	7,488,636	3,698,516	61,760	35,813	2,691,943
Clay.....	7	7,698,500	153,040	353,550	10,086	17,667	353,550
Clayton.....	1	8,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Crawford.....	4	2,587,537	664,858	349,897	15,155	30,980	308,732
Dallas.....	24	55,123,197	2,551,431	3,982,920	292,979	123,561	3,596,900
Davis.....	5	2,996,960	663,611	380,230	19,910	9,350	331,136
Decatur.....	21	23,558,496	4,577,412	2,328,314	95,451	169,980	2,032,938
Delaware.....	7	6,189,000	569,055	480,980	31,310	3,000	397,540
Des Moines.....							
Dickinson.....							
Dubuque.....							
Emmet.....							

TABLE NO. 4—CONTINUED.

Counties.	Number Reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, and Market for Same.			
				Pounds of butter made.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the State.
Fayette	20	51,954,710	2,077,318	2,855,422	226,755	2,548	2,826,125
Floyd	5	4,104,800	4,104,800	1,062,900	25,635	24,000	1,014,265
Franklin	6	6,583,100	1,173,800	841,250	20,600	21,300	799,450
Fremont							
Greene							
Grundy	6	15,535,600	789,800	922,220	75,920	4,350	849,020
Guthrie	10	11,599,400	1,752,300	1,015,600	30,860	50,530	934,100
Hamilton	4	12,563,000	787,500	727,840	81,100	1,400	645,340
Hancock	7	4,159,000	2,124,600	794,410	20,625	900	772,885
Hardin	10	27,273,873					
Harrison	1	1,028,000	27,300	52,600	2,900	5,100	45,500
Henry							
Howard	8	5,804,660	1,506,244	790,286	42,200	7,128	741,948
Humboldt	10	8,582,800	1,064,400	666,785	41,070	6,500	699,215
Ida	2		585,800	205,000	4,250	6,000	196,750
Iowa	7	12,977,900	290,120	680,180	64,150	122,700	493,220
Jackson	12	12,460,050	2,628,850	1,388,090	27,100	45,000	1,215,290
Jasper	2	2,976,600	169,000	179,315	11,058	1,822	168,416
Jefferson	2	1,382,213	219,800	115,190	4,240	15,000	93,850
Johnson	1		80,000	27,000		20,220	6,880
Jones	13	37,568,249	1,324,332	2,221,169	102,668	94,837	2,032,668
Keokuk							
Kossuth	21	21,235,866	1,961,055	1,868,650	145,243	27,465	1,695,842
Lee							
Linn	13	17,239,490	2,529,475	1,460,812	46,857	178,210	1,235,646
Louisa							
Lucas							
Lyon	2	770,760	803,280	871,970	2,835	1,725	866,410
Madison							
Mahaska	1		380,000	94,000		10,000	84,000
Marion	1		401,000	126,800	5,700	22,500	98,600
Marshall							
Mills							
Mitchell	9	471,700	4,527,020	1,318,045	49,062	217,070	1,051,912
Monona	1		130,540	40,000	400	75	39,625
Monroe	1	1,225,480	109,800	86,140	6,300	16,250	63,590
Montgomery							
Muscatine	1		222,640	62,800	300	26,700	24,900
O'Brien	5	2,294,718	2,342,760	761,832	19,451	11,300	731,121
Oceola	2	630,000	887,150	415,720	4,000		411,720
Page	1		3000,000	1,000,000		100,000	900,000
Palo Alto	14	20,295,643	753,684	1,444,744	158,482	42,185	1,249,087
Plymouth	3	2,485,700	416,240	293,000	16,256	870	275,980
Pocahontas	3	275,000	651,450	235,180	5,360	1,140	230,680
Polk	5	2,854,000	5,866,842	2,167,483	5,225	558,900	1,508,252
Pottawattamie	5	6,466,465	1,880,810	1,277,110	600	26,000	1,260,511
Poweshiek	3	2,566,465	1,064,810	865,610			365,610
Ringgold							
Sac	8	2,769,795	1,766,568	657,663	22,275	670	624,718
Scott	1		160,000	40,500	1,000	12,500	27,000
Shelby	8	4,977,125	1,222,802	650,469	30,725	4,245	615,825
Sioux	6		2,968,230	1,159,299	13,225	1,790	1,144,274
Story	7	12,815,880	684,785	766,010	125,580	30,900	597,220
Tama	4	2,201,615	451,740	277,900	1,140	7,100	266,680
Taylor	2		4,500,000	1,160,670	2,500	7,200	1,150,970

TABLE NO. 4—CONTINUED.

Counties.	Number Reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, and Market for Same.			
				Pounds of butter made.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the State.
Union.....	1	-----	2,250,000	750,000	-----	50,000	700,000
Van Buren.....	-----	-----	-----	-----	-----	-----	-----
Wapello.....	2	760,000	760,800	290,530	2,600	24,260	252,080
Warren.....	1	6,486,400	1,587,560	683,031	3,000	3,000	687,031
Washington.....	-----	-----	-----	-----	-----	-----	-----
Wayne.....	-----	-----	-----	-----	-----	-----	-----
Webster.....	2	258,110	202,060	314,260	90,770	17,300	206,210
Winnebago.....	9	20,720,295	745,387	1,141,956	90,773	12,960	1,038,273
Winnebiek.....	13	-----	7,531,772	2,045,697	37,137	15,680	1,902,940
Woodbury.....	2	-----	12,617,650	4,846,930	1,700	300,000	4,545,230
Worth.....	8	11,188,340	1,230,390	609,991	97,475	12,070	500,446
Wright.....	4	-----	1,700,000	522,850	20,145	6,500	496,205
THE STATE.....	508	796,873,690	141,869,998	75,845,028	3,222,422	3,220,609	66,512,287

## DAIRY COMMISSIONER'S REPORT.

## RAILROAD BUTTER SHIPMENTS.

Through the kindness of the freight officials of the various railroads of the state, this office is able to give the following table, showing the number of pounds of butter shipped from each county in the state to points outside the state. The railroads report the gross weight, but the table given herewith shows the net weight, which is found by subtracting sixteen per cent of the gross weight.

COUNTIES SHIPPING MORE THAN 1,000,000 POUNDS, NET, OF BUTTER IN THE YEAR ENDING SEPTEMBER 30, 1906.

1906	Counties,	1904
8,078,301	Woodbury	5,578,214
5,327,811	Polk	3,271,425
3,149,763	Clayton	2,698,486
2,795,297	Bremer	2,109,607
2,562,858	Dubuque	2,276,778
2,474,109	Delaware	2,212,283
2,404,836	Lee	2,508,889
2,399,881	Page	605,417
2,365,684	Fayette	2,022,812
2,286,816	Jones	2,850,841
2,146,074	Chickasaw	1,922,304
1,954,725	Butler	1,579,732
1,939,405	Kossuth	1,556,977
1,938,982	Carroll	1,272,854
1,919,209	Winneshiek	1,622,969
1,828,524	Buchanan	1,810,479
1,784,398	Mitchell	1,130,688
1,696,892	Linn	1,966,260
1,681,511	Hardin	1,881,490
1,539,576	Sioux	1,008,287
1,548,516	Jackson	1,399,796
1,470,030	Hamilton	1,158,969
1,393,558	Cerro Gordo	820,550
1,338,071	Black Hawk	1,086,418
1,331,858	Adair	847,744
1,327,887	Audubon	899,436
1,301,783	Union	488,402
1,283,597	Allamakee	1,227,289
1,081,468	Palo Alto	1,083,902
1,070,783	Calhoun	1,015,575
1,049,958	Howard	1,007,981
1,008,898	Grundy	819,888
1,006,208	Buena Vista	843,788
1,004,439	Crawford	895,187
9,850,906	Totals	58,578,787

These 14 counties ship 73 per cent. of the 91,511,561 net pounds of butter shipped from State.

**TABLE SHOWING TOTAL NET BUTTER SHIPMENTS OF THE STATE FOR THE YEARS 1890 TO 1905 INCLUSIVE, FROM IOWA TO POINTS OUTSIDE THE STATE; ALSO INCREASE OR DECREASE AS COMPARED WITH THE YEAR PRECEDING**

Years Ending October 1.	Net pounds of butter shipped.	Increase over pre- ceding year.	Decrease from pre- ceding year.
1890.....	71,255,793		
1891.....	68,000,716		2,565,080
1892.....	60,112,931		8,577,785
1893.....	54,572,902		5,540,029
1894.....	54,509,417		63,485
1895.....	68,497,108	11,987,691	
1896.....	80,082,916	11,585,808	
1897.....	83,620,081	3,537,165	
1898.....	75,864,837		6,255,744
1899.....	76,620,823		744,011
1900.....	71,719,529		4,910,997
1901.....	74,893,995	3,144,666	
1902.....	72,714,584		2,149,411
1903.....	77,079,794	4,365,210	
1904.....	75,889,280		1,190,514
1905.....	91,051,551	15,162,291	

**TABLE SHOWING NET POUNDS OF BUTTER SHIPPED OUT OF THE STATE, AS REPORTED BY THE RAILROADS.**

Counties.	1904	1905	Increase	Decrease
The State.....	75,889,280	91,051,551	15,162,291	
Adair.....	647,744	1,831,358	683,614	
Adams.....	51,920	84,284		17,868
Allamakee.....	1,227,289	1,293,597	66,308	
Appanoose.....	59,807	857		59,450
Audubon.....	899,438	1,827,957	427,919	
Benton.....	422,053	457,983	35,930	
Black Hawk.....	1,086,418	1,538,071	251,653	
Boone.....	67,501	49,078		18,423
Bremer.....	2,169,667	2,705,237	535,570	
Buchanan.....	1,810,479	1,828,624	18,145	
Huena Vista.....	843,712	1,006,208	162,496	
Butler.....	1,879,732	1,934,725	54,993	
Calhoun.....	1,013,375	1,070,783	57,408	
Carroll.....	1,272,834	1,926,932	654,098	
Cass.....	72,695	201,247	128,552	
Cedar.....	874,984	244,171		110,813
Cerro Gordo.....	820,550	1,393,856	573,306	
Cherokee.....	181,071	270,089	89,018	
Chickasaw.....	1,922,604	2,145,074	222,470	
Clarke.....	9,118	20,758	11,640	
Clay.....	688,174	676,754		11,420
Clayton.....	2,693,439	3,149,763	456,324	
Clinton.....	904,853	655,448		249,405
Crawford.....	895,137	1,004,439	109,302	
Dallas.....	599,585	561,107		161,522
Davis.....	84	1,024	940	
Decatur.....	98,975	84,048		14,927
Delaware.....	2,021,288	2,474,100	452,812	
Des Moines.....	266,716	324,177	57,461	
Dickinson.....	545,900	483,315		62,585
Dubuque.....	2,276,778	2,569,853	293,075	
Emmet.....	453,128	597,087	143,959	
Fayette.....	2,022,812	2,395,634	342,822	
Floyd.....	799,822	723,058		76,764
Franklin.....	451,735	743,800	292,065	
Frederick.....	152,493			152,493
Greene.....	157,657	68,571		89,086
Grundy.....	619,838	1,008,893	389,055	

TABLE SHOWING NET POUNDS OF BUTTER SHIPPED OUT OF THE STATE,  
AS REPORTED BY THE RAILROADS.

Counties	1904	1905	Increase	Decrease
Guthrie .....	840,372	97,488	-----	742,884
Hamilton .....	1,168,909	1,470,080	311,121	-----
Hancock .....	461,899	778,070	316,171	-----
Hardin .....	1,881,490	1,881,811	320,821	-----
Harrison .....	283,599	39,000	-----	243,999
Henry .....	58,679	18,009	-----	40,670
Howard .....	1,007,981	1,049,955	41,974	-----
Humboldt .....	737,719	668,453	-----	64,266
Ida .....	192,767	213,124	20,357	-----
Iowa .....	610,641	494,717	-----	115,924
Jackson .....	1,899,736	1,543,515	148,779	-----
Jasper .....	231,000	131,523	-----	99,477
Jefferson .....	98,103	155,454	57,349	-----
Johnson .....	271,771	37,044	-----	234,727
Jones .....	2,350,641	2,286,816	-----	63,825
Keokuk .....	118,508	103,278	-----	15,230
Kossuth .....	1,566,977	1,929,405	372,428	-----
Lee .....	2,508,339	2,404,325	-----	99,013
Linn .....	1,966,209	1,696,892	329,593	-----
Louisa .....	17,794	17,163	-----	631
Lucas .....	87,787	101,823	17,596	-----
Lyon .....	221,808	348,060	126,252	-----
Madison .....	21,584	3,818	-----	18,266
Mahaska .....	97,256	79,722	-----	17,533
Marion .....	85,079	212,729	127,641	-----
Marshall .....	532,231	465,589	-----	66,642
Mills .....	3,221	4,801	1,580	-----
Mitchell .....	1,180,683	1,784,298	603,615	-----
Monona .....	61,253	45,567	-----	15,686
Monroe .....	32,634	47,638	15,019	-----
Montgomery .....	66,674	87,591	-----	23,683
Muscatine .....	82,914	32,328	-----	20,588
O'Brien .....	703,249	688,893	-----	69,876
Osceola .....	399,087	526,754	127,717	-----
Page .....	605,417	2,590,885	1,794,468	-----
Palo Alto .....	1,033,912	1,684,435	650,563	-----
Plymouth .....	489,745	430,097	-----	29,649
Pocahontas .....	384,729	300,666	-----	83,063
Polk .....	2,271,425	5,827,811	3,556,385	-----
Pottawattamie .....	296,811	541,130	244,319	-----
Poweshiek .....	850,174	857,812	-----	492,962
Ringgold .....	-----	-----	-----	-----
Sac .....	588,850	635,397	46,547	-----
Scott .....	257,413	236,682	-----	21,760
Shelby .....	431,094	443,672	12,578	-----
Sioux .....	1,064,287	1,469,576	566,289	-----
Story .....	894,321	875,894	-----	18,427
Tama .....	577,121	486,272	-----	90,849
Taylor .....	823,222	978,588	155,366	-----
Union .....	488,408	1,301,753	813,351	-----
Van Buren .....	5,560	46,099	40,539	-----
Wapello .....	78,918	253,106	274,187	-----
Warren .....	218	1,108	890	-----
Washington .....	219,222	36,821	-----	182,401
Wayne .....	808,090	933,927	125,933	-----
Webster .....	601,166	592,117	-----	9,049
Winnebago .....	958,787	869,207	-----	19,580
Winnechek .....	1,622,969	1,919,209	296,240	-----
Woodbury .....	5,878,214	5,073,201	2,604,987	-----
Worth .....	709,717	792,845	82,628	-----
Wright .....	868,009	582,230	-----	285,779
The State .....	75,880,860	91,651,551	15,162,291	-----

## CREAMERY LIST.

In addition to the following 568 creameries and 87 skimming stations there are 1061 purchasing agents reported by 20 central creameries. It is evident that this report is not complete and it is estimated that there are 1250 to 1300 purchasing agents for cream in the State.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker	Separator of Galed cream.	Method of re-
<b>ADAMS COUNTY</b>								
1	Adair.....	Adair Co-op. Creamery Co.....	Co-op.	M. L. McManus, Secy.	Adair.....	O. E. McIntire.....	S & G O	Test
2	Arbor Hill.....	Arbor Hill Co-op. Creamery Co.....	Co-op.	O. C. Pease, Sec'y & Mgr.	Stuart.....	E. J. Erb.....	S & G O	Test
3	Fontanelle.....	Blue Grass Creamery Co.....	Indiv.	A. L. Stewart & Co.	Fontanelle.....	L. R. Stewart.....	S & G O	Test
4	Canby.....	Blue Grass Creamery Co. (S).....	Indiv.	A. L. Stewart & Co.	Fontanelle.....	.....	S & G O	Test
5	Flak.....	Blue Grass Creamery Co. (S).....	Indiv.	A. L. Stewart & Co.	Fontanelle.....	.....	S & G O	Test
6	Prussia.....	Blue Grass Creamery Co. (S).....	Indiv.	A. L. Stewart & Co.	Fontanelle.....	.....	S & G O	Test
7	Greenfield.....	Blue Grass Creamery Co. (S).....	Indiv.	A. L. Stewart & Co.	Fontanelle.....	.....	S & G O	Test
8	Greenfield.....	Greenfield Creamery company	Stock	Jas. F. Laude, Sec. & Mgr.	Greenfield.....	F. L. Odell.....	Separator	Test
9	Bradgate.....	Blue Grass Creamery	Indiv.	A. L. Stewart & Co.	Fontanelle.....	R. E. Brown.....	S & G O	Test
<b>ADAMS COUNTY</b>								
10	Mt. Etna.....	Mt. Etna Farmers Mut. O. O.....	Co-op.	A. O. Peterson, Sec.	Mt. Etna.....	T. O. Abbott.....	Separator	Test
11	Nevinville.....	Farmers Mut. Co-op. O. Assn.....	Co-op.	E. B. Steele, Sec.	Nevinville.....	C. Sorenson.....	Separator	Test
<b>ALLAMAKEE COUNTY</b>								
12	Dorchester.....	Little Dairy Creamery	Indiv.	Ben W. Schulte, Prop.	Dorchester.....	Ben W. Schulte.....	G. Cream	Oil Test
13	Canby.....	Calhoun Creamery Co.....	Co-op.	P. E. O'Donnell, Sec.	Church.....	A. V. Ferris.....	G. Cream	Oil Test
14	Postville.....	Postville Farmers Co-op. O. C.	Co-op.	F. H. Welsell, Sec'y	Postville.....	Jas. A. Gordon.....	Hand Slop.	Oil Test
15	Waterville.....	Farmers Co-op. Creamery Co.	Co-op.	Peter Arneson.....	Waterville.....	W. W. Hessel.....	G. Cream	Oil Test
16	Waukon.....	Ludlow Co-op. Creamery Co.	Co-op.	F. A. Sanderman, Sec.	Waukon.....	W. P. Ruth.....	S. & G. C.	Test
17	Quandah.....	Arctic Spring Creamery	Indiv.	L. D. Johnson, Prop.	Quandah.....	Michel Bakken.....	G. Cream	Oil Test
18	Waukon.....	Farmers Waukon Co-op. O. C.	Co-op.	A. L. White Sec.	Waukon.....	Jackson Smith.....	G. Cream	Oil Test
19	New Albin.....	Farmers Creamery Co.	Co-op.	W. F. Thompson, Pres.	New Albin.....	E. Rice.....	S. & G. C.	Test

AUDUBON COUNTY—		TY—					
20	Audubon	Sharon Creamery Co.	Co-op.	Chris E. Moller, Sec.	Audubon R. No. 4	M. Andersen	Gath. Cr.
21	Brayton	Oakfield Twp. Sep. C. Co.	Co-op.	Hans Nymand Sec.	Brayton	J. P. Nielson	Separator
22	Exira	Audubon Twp. Sep. C. Co.	Co-op.	P. Jensen, Sec.	Exira	P. Jensen	Separator
23	Exira	West Hamlin Sep. Creamery Co.	Co-op.	Peter Sorensen, Sec.	Exira	Peter Sorensen	Separator
24	Exira	Exira Creamery Co.	Co-op.	Chris O. Nelson, Sec.	Exira	Chris O. Nelson	S. & G. C.
25	Hamlin	Blue Grass Sep. Creamery Co.	Co-op.	C. V. Christensen, Sec.	Hamlin	Fred Hellesman	S. & G. C.
26	Kimbalton	Danish Sep. Creamery Co.	Co-op.	Peter Lukke, Sec.	Audubon R. No. 4	Peter Thuesen	Separator
27	Ross	Ross Creamery Co.	Co-op.	H. W. Stearns, Sec.	Audubon	B. Jensen	Hand Sep.
28	Manning	Liberty Creamery Co.	Co-op.	Geo. Nelson, Sec.	Irwin	Oscar Jensen	Gath. Cr.
BENTON COUNTY—							
29	Blairtown	Blairtown Creamery	Indiv.	Charles Hanbold	Blairtown	Charles Hanbold	Hand Sep.
30	Vinton	The Vinton Creamery	Indiv.	S. Bailey, Prop.	Vinton	S. Bailey	S. & G. C.
31	Norway	Norway Creamery	Indiv.	M. B. Hershey, Prop.	Norway	M. B. Hershey	Hand Sep.
32	Van Horne	Van Horne Creamery	Indiv.	H. O. Dauchy, Prop.	Van Horne	H. O. Dauchy	Hand Sep.
33	Urbana	Urbana Creamery Co.	Indiv.	James Romine, Prop.	Urbana	James Romine	S. & G. C.
BLACK HAWK COUNTY—							
34	LaPorte City	LaPorte Creamery Co.	Co-op.	C. B. Gingrich, Sec.	LaPorte City	M. E. Benson	Gath. Cr.
35	Waterloo	Palmer-Hubbard C. Co.	Stock	C. V. Rosenberger, Sec.	Independence	E. Lamoree	Hand Sep.
36	Benson	Palmer Dairy Co.	Co-op.	W. Barth, Sec.	Cedar Falls R. 2	Geo. W. Wardell	Separator
37	Grain Creek	Grain Creek Creamery	Indiv.	Wm. Welter, Prop.	Dewar	Wm. Meler	Separator
38	Dewar	Great Western Creamery	Co-op.	G. M. Fiddell, Sec.	Dunkerton	John Tegtmeyer	Separator
39	Dunkerton	Farmers Creamery Co.	Co-op.	D. G. Kieckhefer, Sec.	Waterloo	O. G. Alexander	Separator
40	Eagle Center	Eagle Center Dairy Assn.	Co-op.	L. S. Finch, Sec.	Waterloo	W. H. Chapman	Separator
41	Fairbank	East Lester Creamery Co.	Co-op.	C. A. George, Sec.	Fairbank	C. E. Grant	Separator
42	Finchford	Union Creamery Co.	Co-op.	C. H. Brandt, Sec.	Winslow	I. R. Moon	Separator
43	Hudson	Hudson Co-op. Dairy Assn.	Co-op.	J. E. Rundtes, Sec.	Hudson	H. C. Koeneke	Separator
44	Janesville	Mt. Vernon Creamery Co.	Co-op.	J. E. Rundtes, Sec.	Janesville	A. J. Frees	S. & G. C.
45	Jubilee	Jubilee Co-op. Creamery Co.	Co-op.	F. J. Orth, Sec.	Raymond R. No. 1	Byron Lenius	Separator
46	Voorhes	Red Bird Creamery	Co-op.	E. Stevens, Sec.	Voorhes	W. E. Hammet	Separator
47	Gilbertville	Gilbertville Dairy Assn.	Co-op.	J. B. Kascht, Sec.	Gilbertville	M. E. Envelidsen	Separator
48	Waterloo	Edwards Creamery	Indiv.	H. O. Moxdorf, Prop.	Waterloo	H. O. Moxdorf	Separator
49	Waterloo	Farmers Dairy Assn.	Co-op.	U. S. Blouzh, Sec.	Waterloo R. No. 6	R. W. Chadwick	Separator
50	Cedar Falls	Black Hawk Creamery	Co-op.	J. Marston, Sec.	Cedar Falls	A. K. Smith	S. & G. C.
BOONE							
51	Boone	Dodge Farmers Co-op. Cr. Co.	Co-op.	Jacob Richert, Sec.	Boone R. No. 5	Aug. Druecher	Separator
52	Rosendale	Rosendale Co-op. Creamery Co.	Co-op.	M. P. Peterson, Sec.	Story City	L. C. Peterson	Separator

## CREAMERY LIST—CONTINUED.

Office record number	Location.	Name of Creamery.	How Operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker	Separator or Ralisher cream.	Method of re-celving milk.
<b>BRMER CO.</b>								
33	Bremer	Bremer Creamery Co.	Co-op.	H. L. Kelley, Sec.	Waverly R. No. 6	Wm. Kallenbach	Separator	Test
34	Bremer	Western Douglas Cr. Co.	Co-op.	Aug Hoppenworth, Sec.	Tripoli R. No. 1	C. H. Wedemeyer	Separator	Test
35	Buck Creek	Little Valley Creamery Co.	Co-op.	A. K. Judisch, Sec.	Buck Creek	Fred Willis	Separator	Test
36	Denver	Farrington Creamery Co.	Co-op.	F. Garton, Sec.	Cedar Falls	C. Woodworth	Separator	Test
37	Denver	First Maxwell Creamery Co.	Co-op.	Wm. Millus, Sec.	Denver	John Wedemeyer	Separator	Test
38	Frederika	Frederika Creamery Assn.	Co-op.	J. H. McDonald, Sec.	Frederika	Cecil E. Carr	Separator	Test
39	Frederika	Klinger Creamery	Indiv.	C. H. Kollarsen, Prop.	Klinger	C. H. Kollarsen	Separator	Test
40	Readlyn	Maxfield Creamery Co.	Co-op.	J. Sirotnian, Sec.	Readlyn R. No. 6	F. H. Wahling	Separator	Test
41	Readlyn	Climax Creamery Co.	Co-op.	Henry Specht, Sec.	Sumner R. No. 4	C. L. Mills	Separator	Test
42	Sumner	Excelsior Creamery Co.	Co-op.	H. E. Wutke, Sec.	Sumner R. No. 2	F. M. Zell	Separator	Test
43	Sumner	Sumner Creamery Co.	Co-op.	John Dawson, Sec.	Sumner R. No. 3	Henry Hankner	Separator	Test
44	Tripoli	Porters Sliding Creamery Co.	Co-op.	H. Brown, Sec.	Tripoli R. No. 5	Wm. Ambros	Separator	Test
45	Tripoli	Artesian Creamery Co.	Co-op.	G. Wilbraunt, Sec.	Tripoli R. No. 2	F. C. Otteroge	Separator	Test
46	Denver	Artesian Creamery Co.	Co-op.	G. Jahnske, Sec.	Tripoli	E. C. Homan	Separator	Test
47	Denver	Washington Creamery Co.	Co-op.	H. Grenting, Sec.	Readlyn	Henry Piegors	Separator	Test
48	Waverly	Washington Creamery Co.	Co-op.	E. H. Walther, Sec.	Waverly R. No. 1	Henry Piegors	Separator	Test
49	Waverly	Wagel Creamery Co.	Co-op.	S. M. Lehman, Sec.	Waverly R. No. 4	Wm. A. Rotherman	Separator	Test
50	Tripoli	Grove Hill Creamery Co.	Co-op.	H. J. Jena, Sec.	Tripoli, R. No. 1	Wm. Daniels	Separator	Test
51	Fairbanks	Spring Fountain Cr.	Co-op.	Frank Kane, Sec.	Fairbank	Frank Daniels	Separator	Hund.
52	Sumner	Spring Fountain Cr.	Co-op.	Joe Vorka, Sec.	Sumner	Fred Sommer	Separator	Test
53	Readlyn	Readlyn Creamery Co.	Stock	Rudolph Tiedt, Sec.	Readlyn R. No. 1		Separator	Test
<b>BUCHANAN CO.</b>								
74	Aurora	Aurora Creamery	Indiv.	Geo. L. Weeks, Sec & Prop.	Aurora	C. K. Eisbtemier	Separator	Test
75	Brandon	Brandon Creamery	Indiv.	Wm. Evans, Prop.	Brandon	Wm. Evans	Galt O.	Test

76	Fairbank	Fairbank Farmers Creamery	Co-op.	Jesse Lyan, Sec.	Fairbank	H. Opperman	Separator	Test
77	Hazleton	Hazleton Farmers Creamery Co.	Co-op.	L. Gastenberger, Sec.	Hazleton	E. M. Vargason	1 & G. O.	Test
78	Independence	Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Or.	Gath. Or.	Test
79	Rowley	Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Or.	Gath. Or.	Test
80	Jeauip	Jeauip Creamery Co.	Co-op.	C. L. Bright, Secretary	Jeauip	2 & G. C.	2 & G. C.	Test
81	Lamont	Lamont Creamery Co.	Co-op.	J. D. Thompson, Secretary	Lamont	Separator	Separator	Test
82	Otterville	Otterville Creamery Co.	Co-op.	Geo. M. Vincent, Secretary	Otterville	8 & G. O.	8 & G. O.	Test
83	Stanley	Stanley Creamery	Indiv.	Geo. L. Weeks	Aurora	1 & G. O.	1 & G. O.	Test
84	Winthrop	Palmer-Hubbard Co.	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Or.	Gath. Or.	Test
85	Quasqueton	Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Or.	Gath. Or.	Test
86	Middlefield	Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Or.	Gath. Or.	Test
87	Newtonville	Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Or.	Gath. Or.	Test
88	Doris	Spring Grove Creamery	Indiv.	A. Campbell, Proprietor	Independence	Hand Sep.	Hand Sep.	Test
COUNTY—								
BUENA VISTA								
89	Albert City	Fairfield Creamery Co.	Co-op.	O. P. Petterson	Albert City	W. H. Anderson	Hand Sep.	Test
90	Newell	Coon River Co-op. Cr. Co.	Co-op.	E. P. Krause, Secretary	Newell	T. M. Borglum	Hand Sep.	Test
91	Newell	The Newell Creamery Co.	Stock	G. F. Allard, Secretary	Newell	G. F. Allard	Hand Sep.	Test
92	Storm Lake	Grant Creamery Co.	Co-op.	Geo. W. Cole, Secretary	Storm Lake	Carl Werder	Hand Sep.	Test
93	Alta	Farmers Co-op. Creamery	Co-op.	C. P. Corneliussen	Alta	H. M. Crocker	Gath. Or.	Test
BUTLER COUNTY								
94	Aplington	Aplington Co-op. Creamery Co.	Co-op.	R. Meyer, Secretary	Aplington	Chas. Wisbar	Separator	Test
95	White Rose	White Rose Creamery	Indiv.	Sam Patterson	Austinville	Sam Patterson	Separator	Test
96	Allison	Allison Creamery	Indiv.	W. H. Odner, Proprietor	Allison	W. H. Odner	Separator	Test
97	Greene	Cold Water Co-op. Dairy Assn.	Co-op.	James W. Williams, Sec.	Greene	Jacob Jacobson	Separator	Test
98	Clarksville	Clarksville Creamery	Stock	H. Brokow	Clarksville	W. S. Berkelew	Separator	Test
99	Dumont	Dumont Creamery	Indiv.	G. H. Gurler, Proprietor	DeKalb, Ill.	G. A. Loomis	Separator	Test
100	Applington	Monroe Central Creamery Co.	Stock	C. H. Gurler, Proprietor	Applington	W. Gilbert	Separator	Test
101	Kesley	Kesley Creamery	Indiv.	Claus Primes, Secretary	Kesley	H. Patterson	Separator	Test
102	New Hartford	Beaver Creamery Co.	Co-op.	Hugh Patterson, Proprietor	New Hartford	W. F. Graham	Separator	Test
103	Parkersburg	Parkersburg Creamery Co.	Stock	W. F. Graham, Secretary	New Hartford	Peter Larsen	Separator	Test
104	Stinclair	Parkersburg Creamery Co. (s)	Stock	W. D. Ceperley, Secretary	Parkersburg	M. W. Ashby	Separator	Test
105	Shell Rock	Shell Rock Creamery Assn.	Stock	W. S. Mead, Mgr.	Shell Rock	M. J. Johnson	Separator	Test
106	Columbian	Columbian Creamery	Indiv.	M. J. Johnson, Manager	Shell Rock	A. Olesen	Separator	Test
107	Victory	Victory Creamery	Co-op.	Hall & Olson	Shell Rock	D. E. Sheldon	Separator	Test
108	Northern West Point	Northern West Point Crm. Co.	Indiv.	A. B. Shadbolt, Secretary	Shell Rock	A. B. Walker	Hand Sep.	Test
109	Greene	Walker Creamery	Co-op.	Herman Debnier, Proprietor	Greene	O. F. Courbat	Separator	Test
110	New Hartford	Alban Creamery Co.	Co-op.	O. F. Courbat, Secretary	New Hartford	8 & G. C.	Separator	Test
111	Aplington	Buck Grove Creamery Co. (s)	Co-op.	O. F. Courbat, Secretary	Aplington	8 & G. C.	Separator	Test
112	Greene	Green Creamery Co.	Co-op.	James W. Williams, Sec.	Greene	8 & G. C.	Separator	Test
113	Bristow	Bristow Creamery	Indiv.	James P. Johnson	Bristow	8 & G. C.	Separator	Test
CALHOUN COUNTY								
114	Lytton	Blue Grass Creamery	Indiv.	I. Hillmann, Proprietor	Lytton	Geo. Hillman	Hand Sep.	Test
115	Lake City	Farmers Co-op. Mut. Crm. Co.	Co-op.	C. W. Jewell, Secretary	Lake City	Carl Lissner	Gath. Cr.	Test

## CREAMERY LIST—CONTINUED.

Office record number	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	Name of Butter Maker	Separator or Gathered cream	Method of re-celving milk.
116	Lytton.....	Williams Co-op Creamery Co....	Co-op.	Henry Krukenberg, Sec.	Fonda.....	Separator	Test
117	Manson.....	Manson Creamery.....	Indiv.	G. B. Moon, Proprietor	Mason.....	S. & G. C.	Test
118	Pomeroy.....	Pomeroy Creamery.....	Indiv.	J. E. Lauritsen, Proprietor	Pomeroy.....	S. & G. C.	Test
119	Rockwell City.....	Andrew Wood Creamery Co....	Stock	I. H. Allen, Secretary	Rockwell City.....	Gath. Cr.	Test
CARROLL COUNTY							
120	Arcadia.....	Golden Star Creamery Co....	Stock	C. Wiebers, Secretary	Arcadia.....	Separator	Test
121	Breda.....	Viola Mut. Creamery Assn.....	Co-op.	Paul Luckow, Secretary	Breda.....	Separator	Test
122	Coon Rapids.....	Coon Rapids Creamery.....	Indiv.	H. L. Fest, Proprietor	Coon Rapids.....	Hand sep.	Test
123	Lanesboro.....	Lanesboro Creamery.....	Indiv.	J. A. Stamen, Proprietor	Carroll.....	Hand sep.	Test
124	Mt. Carmel.....	Mt. Carmel Mut. Creamery Co..	Co-op.	M. J. Berger, Secretary	Carroll E No. 2.....	Separator	Test
125	Roselle.....	Rose Valley Creamery Co....	Indiv.	C. Kohorst, Proprietor	C. Kohorst.....	S. & G. C.	Test
126	Templeton.....	Templeton Creamery Co....	Co-op.	Geo. Bierl.....	Templeton.....	S. & G. C.	Test
127	Manning.....	Fairmount Creamery Co....	Stock	J. H. Rushton, Proprietor	Fairmont, Neb.....	Hand sep.	Test
128	Breda.....	Hanford Produce Co. (s).....	Stock	Hanford Produce Co.	Sioux City.....	Gath. Cr.	Test
OARS COUNTY							
129	Cumberland.....	Farmers Mut. Co-op Cr'mery Co	Co-op.	P. Pettinger, Secretary	Cumberland.....	Hand sep.	Test
130	Lyman.....	Lyman Creamery.....	Indiv.	Wm. Wohlenhaus, Prop.	Griswold.....	S. & G. C.	Test
CEDAR COUNTY							
131	Bennett.....	Golden Star Creamery.....	Indiv.	W. H. Kroeger, Proprietor	Bennett.....	Separator	Test
132	Clarence.....	Union Creamery.....	Indiv.	E. Huxoll.....	Lowden.....	S. & G. C.	Test
133	Lowden.....	Union Creamery (s).....	Indiv.	E. Huxoll.....	Lowden.....	S. & G. C.	Test
134	Lowden.....	Home Creamery.....	Indiv.	G. F. Reinking.....	Lowden.....	Gath. Cr.	Test
135	West Branch.....	West Branch Creamery.....	Indiv.	Eves & Elliott, Props.	West Branch.....	S. & G. C.	Test
CHERO GORDO COUNTY							
136	Mason City.....	J. D. Bickle Produce Co....	Stock	M. V. Michel, Secretary	Mason City.....	Hand sep.	Test
137	Plymouth.....	Plymouth Creamery Co....	Stock	T. A. Mosher, Secretary	Plymouth.....	Separator	Test
138	Portland.....	Portland Creamery Co....	Indiv.	C. E. Mosher.....	Portland.....	Gath. Cr.	Test
139	Thornton.....	Sunny Side Creamery.....	Indiv.	J. O. Mortensen, Proprietor	Thornton.....	Gath. Cr.	Test

140 Meservey.....	Meservey Creamery.....	Indiv.	M. J. Kerman, Proprietor.....	Meservey.....	M. J. Kerman.....	Gath. Cr.	Test
141 Mason City.....	E. B. Higley Co.....	Stock	Howard D. Reynolds, V. P.....	Mason City.....	C. H. Cleveland.....	Gath. Cr.	Test
CHEROKEE COUNTY—							
142 Aurella.....	Aurella Creamery.....	Stock	A. M. C. Tudson, Secretary.....		Alex. McAdam.....	Hand sep.	Test
143 Marcus.....	White Rose Creamery.....	Indiv.	C. E. Austin.....		E. F. Julian.....	S. & G. C.	Test
144 Cherokee.....	Cherokee Creamery.....	Indiv.	Younger Bros.....		Thomas Devlin.....	Hand Sep.	Test
145 Washta.....	Washta Creamery.....	Indiv.	James Robertson, Jr.....		Otto Bucher.....	Hand Sep.	Test
CHICKASAW COUNTY—							
146 Boyd.....	Boyd Farmers Creamery.....	Co-op.	J. De Bettignes, Secretary.....	New Hampton rfd No. 2.....	Ed Capper.....	Separator	Test
147 Alta Vista.....	Alta Vista Farmers Crm. Assn.....	Co-op.	J. Westenberg, Secretary.....	Alta Vista.....	R. J. White.....	Separator	Test
148 Devon.....	Devon Farmers Creamery Assn.....	Co-op.	Ed. Capper, Secretary.....	Devon.....	Harry Forester.....	Separator	Test
149 Alta Vista.....	Deerfield Creamery.....	Co-op.	J. W. Kane, Secretary.....	Alta Vista.....	Jake Eckstein.....	Separator	Test
150 Fredericksburg.....	Fredericksburg Butter Factory.....	Co-op.	C. L. Whitcomb, Secretary.....	Fredericksburg rfd No. 1.....	John Finnegan.....	Separator	Test
151 Ionla.....	Ionla Farmers Creamery Assn.....	Co-op.	H. B. Young, Secretary.....	Ionla.....	Fred Zigler.....	Separator oil test	Test
152 Jerico.....	Jerico Creamery Assn.....	Co-op.	L. B. Williamson, Sec.....	Jerico.....	H. Nickelson.....	Gath. Cr.	Test
153 Lawler.....	Lawler Creamery Assn.....	Co-op.	M. J. Connors, Secretary.....	Lawler.....	Geo. G. Kolthoff.....	Separator	Test
154 Little Turkey.....	Little Turkey Creamery Co.....	Stock	H. B. Carpenter, Secretary.....	Elkader.....		Gath. Cr.	Test
155 New Hampton.....	New Hampton Creamery.....	Indiv.	James L. Humphrey, Jr.....	New Bedford, Mass.....	J. W. Cagley.....	S. & G. C.	Test
156 New Hampton.....	New Hampton Creamery (s).....	Indiv.	James L. Humphrey, Jr.....	New Bedford, Mass.....	Chas. Herren.....	S. & G. C.	Test
157 Fredericksburg.....	New Hampton Creamery (s).....	Indiv.	J. W. Blind, Secretary.....	Nashua.....	Robert Maille.....	S. & G. C.	Test
158 Nashua.....	Farmers Co-op. Creamery Assn.....	Co-op.	Chas. Gurlier & Co.....	DeKalb, Ill.....		Gath. Cr.	Test
159 Nashua.....	Nashua Creamery.....	Indiv.	Frank N. Gindorff, Sec.....	North Washington.....		Gath. Cr.	Test
160 Nth. Washington.....	Nth. Washington Crm. Co. Co. (s).....	Co-op.	Frank N. Gindorff, Sec.....	North Washington.....		Separator	Test
161 Devon.....	Nth. Washington Crm. Co. Co. (s).....	Co-op.	Frank N. Gindorff, Sec.....	North Washington.....		Separator	Test
162 Deerfield.....	Nth. Washington Crm. Co. Co. (s).....	Co-op.	Frank N. Gindorff, Sec.....	Lawler, rfd No. 2.....	G. F. Langquist.....	Separator	Test
163 Ionla.....	Saude Co-op. Creamery Assn.....	Co-op.	Wm. Sanderson, Secretary.....	Fredericksburg rfd No. 4.....	S. Binns.....	Separator	Test
164 Saude.....	Williamstown Creamery Assn.....	Co-op.	H. S. Karsen, Secretary.....			Separator	Test
165 Williamstown.....		Co-op.					
CLAY COUNTY—							
166 Dickens.....	Farmers Co-op. Creamery Co.....	Co-op.	Wm. McCurdy, Sec. & Mgr.....	Dickens.....	A. W. Snyder.....	Separator	oil test
167 Fostoria.....	Fostoria Creamery Co.....	Stock	Frank Riley, Secretary.....	Fostoria.....	Chas. Riley.....	S. & G. C.	Test
168 Royal.....	Royal Creamery Co.....	Indiv.	McKay & Sonke, Props.....	Ames.....	E. R. Mitchell.....	Hand sep.	Test
169 Langdon.....	Farmers Co-op. Creamery Co.....	Co-op.	H. R. Beck, Proprietor.....	Langdon, Box 22.....	E. B. Olson.....	Separator	Test
170 Spencer.....	The Spencer Creamery.....	Indiv.	J. W. Berry, Proprietor.....	Spencer.....	F. L. Repta.....	S. & G. C.	Test
171 Webb.....	Webb Creamery.....	Ind v.	J. A. Reid, Proprietor.....	Webb.....	J. A. Reid.....	Hand sep.	Test
172 Webb.....		Ind v.					
CLAYTON COUNTY							
173 Elkader.....	Elkader Creamery Co.....	Stock	H. R. Carpenter, Secretary.....	Elkader.....	H. M. Clough.....	Gath. Cr.	Test
174 Edgewood.....	Fidelity Creamery.....	Indiv.	H. F. Beyer, Proprietor.....	Edgewood.....	E. J. Whipple.....	S. & G. C.	Test
175 Elkhart.....	Elkhart Creamery.....	Indiv.	H. F. Beyer, Proprietor.....	Edgewood.....	David Smith.....	Hand sep.	Test
176 Farmersburg.....	Farmersburg Co-op Creamery.....	Co-op.	Jno. Jonson.....	Farmersburg.....	I. D. Hendershoot.....	Hand sep.	Test

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Rutherford cream.	Method of receiving milk.
176	Garnaville	Garnaville Farmers Creamery Co	Co-op	H. H. Huhman Secretary	Garnaville	O. H. Schumacher	Gath. Or.	Test
177	Luana	Luana Farmers Co-op Crm. Co	Indiv	James Humphrey Secretary	Luana	Jas. Barker	Gath. Or.	Test
178	Littleport	Littleport Creamery	Indiv	H. F. Beyer, Proprietor	Edgewood	Jan. W. Apple	Separator	Test
179	Communla	Meyer Kling Creamery	Indiv	J. W. Meyer, Proprietor	Edgewood R. No. 1	Peter Kling	S. & G. C.	Test
180	Monona	Monona Creamery Co.	Stock	H. R. Carpenter Secretary	Elkader	G. W. Miller	Hand Sep.	Test
181	Osterdock	Osterdock Creamery Co.	Stock	J. D. Hickel, Manager	Elkader	A. H. Peacock	Gath. Or.	Test
182	McGregor	J. D. Bickel Produce Co.	Stock	G. R. Engelhardt, Sec.	McGregor No. 7	G. H. Foshion	Gath. Or.	Test
183	St. Olaf	St. Olaf Co-op. Creamery Co.	Co-op	O. C. Gladwin, Secretary	St. Olaf R. No. 7	J. B. Ershon	Gath. Or.	Test
184	Strawberry Point	Strawberry Point Farm. Crm Co	Co-op	Barney Olinger, Secretary	Strawberry Point	H. J. Evans	Separator	Test
185	Volga City	Pride of the West	Co-op	John Geraghty, Secretary	Volga City	Watson Shiek	S. & G. C.	Test
186	Watson	Blue Grass Creamery	Co-op		McGregor R. No. 1	F. A. Fict	Hand Sep.	Test
CLINTON COUNTY								
187	Delmar Junction	Springbrook Creamery	Indiv	John Newman Co.	Elgin, Ill	W. Gosman	S. & G. C.	Test
188	Elwood	Springbrook Creamery	Indiv	John Newman Co.	Elgin, Ill	F. W. Leinbaugh	S. & G. C.	Test
189	Petersville	Springbrook Creamery	Indiv	John Newman Co.	Elgin, Ill	Carl Euremlus	S. & G. C.	Test
190	Teeds Grove	Springbrook Creamery	Indiv	John Newman Co.	Elgin, Ill	A. Anrep	S. & G. C.	Test
191	Weldon	Springbrook Creamery	Indiv	John Newman Co.	Elgin, Ill	Q. B. Berst	S. & G. C.	Test
192	Wheatland	Farmers Co-op. Creamery Co.	Co-op	Edna Hart, Secretary	Wheatland	A. E. Banta	Separator	Test
193	Toronto	Diamond Creamery Co.	Indiv	C. W. Simpson, Manager	Toronto	Wilfred L. Sloan	S. & G. C.	Test
194	Lost Nation	Diamond Creamery Co (s)	Indiv	C. W. Simpson, Manager	Monticello		S. & G. C.	Test
195	South Grove	Diamond Creamery Co (s)	Indiv	C. W. Simpson, Manager	Monticello		S. & G. C.	Test
196	Smithtown	Springbrook Creamery (s)	Indiv	John Newman Co.	Elgin, Ill		S. & G. C.	Test
197	Browns	Springbrook Creamery (s)	Indiv	John Newman Co.	Elgin, Ill		S. & G. C.	Test
CHAWFORD COUNTY								
198	Denison	Fairmont Creamery Co	Stock	The Fairmont Crm Co Prop.	Fairmont, Neb.	A. F. Durkee	Hand Sep.	Test
DALLAS COUNTY								
199	Dexter	Farmers Co-op Creamery Assn.	Co-op	James L. Keachle Sec.	Dexter	James L. Keachle	S. & G. C.	Test
200	Perry	J. Moody & Sons	Indiv	H. Moody & Sons, Prop.	Perry	Claus Sorenson	S. & G. C.	Test
201	Woodward	Woodward Creamery	Stock	A. E. Smith, Manager	Woodward	A. B. Oulsonkey	S. & G. C.	Test
	Redfield	Smith Produce Co.	Stock	W. H. Hall, Manager	Redfield		S. & G. C.	Test
	Chicago	Iowa Dairy Co (s)	Stock		Yale		S. & G. C.	Test



## CREAMERY LIST—Continued.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Rulhered cream	Method of re-ceiving milk.
241	Terrill.....	Farmers Co-op. Creamery Co.	Co-op.	T. H. Tredick, Sec.	Terrill.....	Roy A. Burt.....	S. & G. C.	Test
242	Superior.....	Superior Creamery Co.	Co-op.	Guy W. Small Sec.	Superior.....	Mr. Wolfe.....	Hand sep.	Test
DUBUQUE COUNTY								
248	Balltown.....	Balltown Co-op Creamery Co.	Co-op.	O. D. Harrington, Secretary	Specht's Ferry R 9	Henry Koehler.....	S. & G. C.	Test
249	Cascade.....	Spring Valley Creamery Co.	Co-op.	J. N. Kremer, Secretary	Cascade.....	Wm. Thompson.....	Separator	Test
250	Cascade.....	Cascade Creamery Co.	Co-op.	J. N. Kremer, Secretary	Cascade.....	C. T. Elliott.....	Separator	Test
251	Farley.....	Hickory Valley Creamery Co.	Stock.	John Kamm, Secretary	Farley R 17	Frank Ruby.....	Separator	Test
252	Dyersville.....	Farmers Golden Star Crm. Co.	Co-op.	J. H. Prier, Secretary	Dyersville R 19	J. B. Feldman.....	S. & G. C.	Test
253	Epworth.....	Dubuque Butter and Milk Co.	Stock.	W. H. Hopkins, President	Dubuque.....	L. H. Flagle.....	Hand sep.	Test
254	Fillmore.....	Fillmore Co-op Creamery Co.	Co-op.	Wm. Craft, Secretary	Cascade R 28	John G. Stemmer.....	Separator	Test
255	Farley.....	John's Creek Creamery	Indiv.	A. K. Grady & Son, Prop.	Farley.....	John Hogan.....	Separator	Test
256	O'Neill.....	Farley Creamery Co.	Stock.	A. K. Grady & Son, Prop.	Farley.....	Thos. Landis.....	S. & G. C.	Test
257	Luxemburg.....	Oak Grove Creamery	Indiv.	Jonathan Poley, Proprietor	Waukeon.....	J. W. Farn.....	S. & G. C.	Test
258	New Vienna.....	Globe Creamery Co.	Stock.	Joseph Friedman, Secretary	N Buena Vista R 2	Anton Smith.....	Separator	Test
259	Bickardsville.....	New Vienna Central Crm. Co.	Stock.	Henry Fungmann, Secretary	New Vienna R 14	George Landis.....	Separator	Test
260	Sherrill.....	Farm Creamery Co.	Stock.	Joe Fisher, Secretary	Vurango R 35	Peter N. Schmitt.....	Separator	Test
261	Sherrill.....	Riverside Creamery Co.	Co-op.	Nic Semmer, Secretary	Dubuque R 1	Nic Semmer.....	Separator	Test
262	Sherrill.....	Sherrill Creamery Company	Co-op.	J. C. Scholten, Secretary	Specht's Ferry R 1	J. Stillmunkes.....	Separator	Test
263	Worthington.....	Worthington Creamery	Indiv.	F. G. Ladd, Proprietor	Worthington.....	C. Baehler.....	S. & G. C.	Test
264	Zwingie.....	Ladd's Creamery	Indiv.	F. G. Ladd, Proprietor	Zwingie.....	F. T. Thiel.....	Hand sep.	Test
265	Holy Cross.....	Holy Cross Creamery Company	Co-op.	Leo Sweeney, Secretary	N Buena Vista R 1	John P. Crippes.....	Separator	Test
266	Dubuque.....	Eda Bluff Creamery	Indiv.	S. P. Wadley & Son	Dubuque.....	A. O. Walker.....	Hand sep.	Test
267	Dubuque.....	Columbia Creamery	Indiv.	George Warner, Proprietor	Dubuque R. 4	Geo. Werner.....	S. & G. C.	Test
268	Dubuque.....	Dubuque Butter & Milk Co.	Stock.	H. H. Hopkins, Manager	Oregon, Ill	O. Howard.....	Hand sep.	Test
269	Richardsville.....	Deutsche Creamery	Indiv.	John Loetscher, Proprietor	Waukeon R 31	John Loetscher.....	Hand sep.	Test
270	Bernard.....	Bernard Creamery	Indiv.	M. R. Cross	Bernard.....	M. R. Cross.....	S. & G. C.	Test
271	Dubuque.....	Iowa Dairy Company	Stock.	A. M. onzett, Sec. & Treas.	Dubuque.....	G. L. Coyle.....	Hand sep.	Test
EMMET COUNTY								
272	Armstrong.....	Farmers Co-op. Creamery Co.	Co-op.	Peter H. Hart, Secretary	Armstrong.....	Henry Chronholm.....	S. & G. C.	Test.
273	Estherville.....	Estherville Creamery Co.	Stock.	J. Cronholm, Manager	Satherville.....	H. W. Sidles.....	Hand Sep.	Test.
274	Halfa.....	The Farmers Creamery Co.	Co-op.	P. A. Gaarde, Secretary	Halfa R. F. D. 1	Adolph Weiss.....	S. & G. C.	Test.
275	Huntington.....	Huntington Co-op. Creamery Co.	Co-op.	Geo. A. Porta, Secretary	Huntington.....	Geo. Graham.....	S. & G. C.	Test.
276	Hopkiss.....	Hopkiss Co-op. Creamery Co.	Co-op.	John A. Bosold, Secretary	Huntington R. 2	Julius Jensen.....	S. & G. C.	Test.
277	Kingland.....	Denmark's Creamery Co.	Co-op.	H. J. Flick, Secretary	Armstrong.....	Ed. Krensin.....	S. & G. C.	Test.
278	Wallingford.....	Wallingford Creamery Co.	Stock.	O. C. Anderson, Secretary	Wallingford.....	J. O. Jensen.....	S. & G. C.	Test.

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## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How Operated	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Rakebater of cream.	Method of re-ceiving milk.
<b>GRUNDY COUNTY—</b>								
809	Applington .....	Buck Grove Creamery .....	Co-op.	O. Niehuis, Secretary .....	Applington .....	J. G. Ellinger .....	Separator .....	Test.
810	Adley .....	J. Johnson Creamery .....	Indiv.	Martin & Johnson, Props. ....	Adley .....	Frank Schutzer .....	Separator .....	Test.
811	Clare .....	Pike Co-op. Creamery Co. ....	Co-op.	E. O. Rounth, Secretary .....	Clare .....	J. F. Christensen .....	S. & G. C. ....	Test.
812	Fredericville .....	Fredericville Co-op. Creamery Co. ....	Co-op.	Haas & Hanson, Secretary ....	Oscar Falls, R. N. ....	A. Kinding .....	S. & G. C. ....	Test.
813	Stout .....	Beaver Center Creamery Co. ....	Co-op.	James A. Meyer, Secretary ....	Stout .....	F. E. Olinger .....	S. & J. C. ....	Test.
814	Reinbeck .....	Reinbeck Creamery Co. ....	Co-op.	W. H. Henning, Secretary ....	Reinbeck .....	F. C. Case .....	Handker .....	Test.
815	Fern .....	Fern Creamery Co. ....	Co-op.	W. H. Henning, Secretary ....	Reinbeck .....	E. T. Soles .....	S. & G. C. ....	Test.
<b>GUTHRIE COUNTY—</b>								
816	Bayard .....	Bayard Co-op. Creamery Co. ....	Co-op.	M. J. Hallman, Secretary .....	Bayard .....	L. R. Winn .....	Gath. Or. ....	Test.
817	Oscey .....	Oscey Creamery Co. ....	Stock	H. E. Smith, Secretary .....	Oscey .....	J. M. Taff .....	S. & G. C. ....	Test.
818	Guthrie Center .....	Guthrie Center Co-op. Cr. Co. ....	Co-op.	J. A. McLaughlin, S. C. ....	Guthrie Center .....	J. M. Taff .....	S. & G. C. ....	Test.
819	Glendon .....	Glendon Creamery Co. ....	Co-op.	A. C. Hanna, Secretary .....	Glendon .....	J. T. Girard .....	Separator .....	Test.
820	Menlo .....	Menlo Creamery Co. ....	Co-op.	A. C. Gurris, Secretary .....	Menlo .....	H. H. Colburn .....	S. & G. C. ....	Test.
821	Panora .....	Panora Creamery .....	Indiv.	F. E. Wilcox, Secretary .....	Panora .....	F. E. Wilcox .....	Separator .....	Test.
822	Stuart .....	Stuart Co-op. Creamery Co. ....	Co-op.	C. M. Cady, Secretary .....	Stuart .....	A. Cochran .....	S. & G. C. ....	Test.
823	Yale .....	Iowa Dairy Co. ....	Stock	W. H. Hall, Manager .....	Yale .....	D. C. Bahlow .....	S. & G. C. ....	Test.
824	Dale City .....	Dale Co-op. Mut. Cr. Ass'n. ....	Co-op.	S. C. Hummer, Secretary .....	Kedfield .....	F. E. Howard .....	Separator .....	Test.
825	North Branch .....	North Branch Co-op. Creamery .....	Co-op.	B. B. Hughes, Secretary .....	Northbranch .....	Geo. Just .....	S. & G. C. ....	Test.
<b>HAMILTON COUNTY—</b>								
826	Ellsworth .....	Ellsworth Co-op. Crm'y Assn. ....	Co-op.	S. Stenberg, Sec. ....	Ellsworth .....	D. W. Mohler .....	S. & G. C. ....	Test.
827	Williams .....	Ellsworth Co-op. Crm'y Assn. (s) ..	Co-op.	S. Stenberg, Sec. ....	Ellsworth .....	.....	S. & G. C. ....	Test.
828	Radcliffe .....	Ellsworth Co-op. Crm'y Assn. (s) ..	Co-op.	S. Stenberg, Sec. ....	Ellsworth .....	.....	S. & G. C. ....	Test.
829	Jewell .....	Jewell Creamery .....	Indiv.	Gronbeck & Morek, Prop's .....	Jewell .....	Chris Morek .....	S. & G. C. ....	Test.
830	Jewell .....	Jewell Creamery (s) .....	Indiv.	Gronbeck & Morek, Prop's .....	Jewell .....	.....	S. & G. C. ....	Test.
831	Randall .....	The Randall Farmer Crm'y Co. ....	Co-op.	H. N. Miller, Sec. ....	Randall .....	H. N. Miller .....	Separator .....	Test.
832	Stanhope .....	Stanhope Creamery .....	Indiv.	E. C. Brewer, Prop. ....	Stanhope .....	W. I. Dilger .....	Gath. Or. ....	Oil-test

HANCOCK COUNTY—				HARDIN COUNTY				HARRISON COUNTY—				HOWARD COUNTY—			
328	Britt	Co-op.	H. O. Jackson, Sec.	341	Alden	Co-op.	T. E. Haston Sec.	353	Magnolia	Co.op.	P. H. Cadwell, Sec.	354	Cresco	Indiv.	Cresco
329	Bruncan	Co-op.	M. L. Jackson, Sec.	342	Buckeye	Co-op.	E. A. Garriel, Sec.	355	Chester	Co-op.	G. C. Leslie, Sec.	356	Chester	Co-op.	Chester
330	Crystal Lake	Co-op.	O. E. Wadsworth, Sec.	343	Cleves	Indiv.	Martin & Johnson, Prop.	357	Elma	Co-op.	Daniel Fallgatter, Sec.	358	Elma	Co-op.	Elma
331	Goodell	Co-op.	H. C. Schultz, Prop.	344	Eldora	Indiv.	Peter Jensen, Prop.	359	Elma	Co-op.	J. Lane, Sec.	360	Elma	Co-op.	Elma
332	Garner	Indiv.	F. L. Kiesel, Sec.	345	Hubbard	Co-op.	J. E. Towley, Sec.	361	Lourdelle	Co-op.	B. Harness, Proprietor	362	Lourdelle	Co-op.	Lourdelle
333	Goodell	Co-op.	F. L. Bush, Sec.	346	Spring Branch Co-op Crm'y Co.	Co-op.	Ernest Hilker, Sec.	363	Lime Springs	Stock.	H. P. Carpenter, Sec.	364	Lime Springs	Stock.	Lime Springs
334	Kanawha	Co-op.	L. C. Peterson, Prop.	347	Hubbard	Co-op.	W. L. Kinsey, Sec.	365	Proftwin	Co-op.	J. A. Dostal, Sec.	366	Proftwin	Co-op.	Proftwin
335	Woden	Indiv.		348	Low Falls Crm'y Co.	Co-op.	C. E. Padan, Sec.	367	Schley	Indiv.	L. T. Fosse & Sons	368	Schley	Indiv.	Schley
				349	New Providence	Stock.	O. E. Padan, Sec.		Steamboat Rock	Co-op.	Alfred Miles, Sec.		Saratoga	Co-op.	Saratoga
				350	Radcliffe	Co-op.	O. E. Padan, Sec.								
				351	Radcliffe	Co-op.	O. E. Padan, Sec.								
				352	Garden City	Co-op.	F. L. Willis, Sec.								
					Steamboat Rock	Co-op.									

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Reathered cream.	Method of re-celving milk.
<b>HUMBOLDT COUNTY—</b>								
833	Arnold.....	Grove Co-op. Creamery Co.	Co-op.	Charles J. Nelson, Sec.	Arnold.....	John F. Schultz.	S. & G. C.	Test
834	Bradgate.....	Bradgate Co-op. Creamery Ass'n.	Co-op.	J. L. Van Horn, Sec.	Bradgate.....	Fred D. Shifflet.	S. & G. C.	Test
835	Bode.....	Bode Creamery Ass'n.	Co-op.	John Pederson, Sec.	Bode.....	M. E. Rossing.	S. & G. C.	Test
836	Goldfield.....	Owl Lake Creamery Co.	Co-op.	C. M. Clausen, Sec.	Goldfield.....	L. M. Tysor.	S. & G. C.	Test
837	Hardy.....	Farmers' Co-op. Creamery Co.	Co-op.	A. N. Clancy, Sec.	Hardy.....	Ira O'Neill.	S. & G. C.	Test
838	Humboldt.....	Humboldt Creamery Co.	Stock.	G. L. Orikahant, Sec.	Humboldt.....	L. P. Hill.	S. & G. C.	Test
839	Otosen.....	Waconata Creamery Ass'n.	Co-op.	L. J. Clave, Sec.	Otosen.....	I. J. Sharsen.	S. & G. C.	Test
840	Renwick.....	Renwick Co-op. Creamery Co.	Co-op.	W. M. Huffman, Sec.	Renwick.....	J. P. Bogh.	S. & G. C.	Test
841	Rutland.....	Rutland Creamery Ass'n.	Co-op.	S. S. Bartley, Sec.	Rutland.....	Ben Launing.	S. & G. C.	Test
842	Thor.....	Clover Creamery Co.	Stock.	Lewis Olson, Sec.	Thor.....	John F. Schultz.	S. & G. C.	Test
843	Arnold.....	Arnold Creamery.	Indiv.	J. F. Schultz, Proprietor.	Arnold.....		S. & G. C.	Test
<b>IDA COUNTY—</b>								
844	Arthur.....	Arthur Creamery	Indiv.	M. J. Conklin, Sec.	Arthur.....	M. J. Conklin.	Hand sep.	Test
845	Boatan.....	Hopkins & Hubbard Creamery	Indiv.	Hopkins & Hubbard.	Correctionville.....	Arthur R. Meen.	Hand sep.	Test
<b>IOWA COUNTY—</b>								
846	Conroy.....	Shimer Creamery Co.	Co-op.	S. H. Stanerson, Sec.	Conroy.....	W. H. Woodcock.	Separator	Test.
847	Glance Bluff.....	Glance Bluff Creamery Co.	Co-op.	M. W. Kelting, Sec.	Williamsburg, R.	Geo. P. Byrne.	S. & G. C.	Test.
848	Ladora.....	Ladora Creamery Co.	Co-op.	J. W. Wilson, Sec.	Ladora.....	John Baling.	S. & G. C.	Test.
849	Marango.....	Marango F. M. Co-op. Cr. Assn.	Co-op.	Dennis Sullivan, Sec.	Marango.....	W. E. Red.	S. & G. C.	Test.
850	Victor.....	Victor Co-op. Creamery Co.	Co-op.	H. Whitworth, Sec.	Victor.....	G. W. Baling.	S. & G. C.	Test.
851	Williamsburg.....	Williamsburg Creamery Co.	Co-op.	Geo. C. House, Sec.	Williamsburg.....	E. E. Montgomery.	Separator	Test.
852	Williamsburg.....	York Creamery Co. (s)	Co-op.	Geo. C. House, Sec.	Williamsburg.....	Theo. Winter.	Separator	Test.
853	North English.....	Yorkshire Creamery (s)	Stock.	H. N. Morrell, Sec.	Williamsburg, R.		Gath. Op.	Test.



## CREAMERY LIST—CONTINUED.

Office record number	Location.	Name of Creamery	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager	Name of Butter Maker.	Separator or Gath. Or.	Method of re-ceiving milk.
419	Monticello	Diamond Creamery Co.	Co-op	C. W. Simpson, Manager	Monticello	W. B. Johnson	S. & G. O.	Test.
420	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
421	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
422	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
423	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
424	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
425	Oxford Junction	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
426	Oxford Junction	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
427	Wyming	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
428	Oxford Junction	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager	Monticello		S. & G. O.	Test.
429	Onslow	Clay Valley Co-op. Cream. Co.	Co-op	John C. Neelan, Secretary	Onslow		Separator	Test.
430	Almona	Onslow Creamery	Co-op	George D. Hogue, Proprietor	Almona	Fred M. Huych	Separator	Test.
431	Onslow	Onslow Creamery	Co-op	George D. Hogue, Proprietor	Onslow	Wm. Evans	Separator	Test.
432	Stech Grove	Stech Grove Co-op. Cream. Co.	Co-op	H. R. Jacobs, Secretary	Stech Grove	Wm. D. Hogue	Separator	Test.
433	Wyming	Wyming Co-op. Cream. Co.	Co-op	L. M. Barrett, Secretary	Wyming	J. M. Wolfert	S. & G. O.	Test.
434	Monticello	Downsville Creamery Co.	Co-op	O. R. Wilder	Monticello	S. M. Conley	S. & G. O.	Test.
435	Knokuk County							
436	Webster	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Secretary	Onkuma		Gath. Or.	Test.
437	Hakeville	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Secretary	Onkuma		Gath. Or.	Test.
438	What Osher	Grinnell Creamery (s)	Indiv	J. W. Fowler, Proprietor	Grinnell		S. & G. O.	Test.
439	Kossuth County							
440	Algona	Algona Co-op Creamery Co.	Co-op	A. W. Sterzbach, Sec.	Algona	A. W. Sterzbach	S. & G. O.	Test.
441	Algona	Plum Creek Creamery Co.	Co-op	C. W. Hopkins, Sec.	Algona	W. G. Sterzbach	S. & G. O.	Test.
442	Burt	Burt Co-op Creamery Co.	Co-op	A. Dan, Sec.	Burt	D. L. Driver	S. & G. O.	Test.
443	Fenton	Sanroft Co-op Creamery Co.	Co-op	John Bernhard, Sec. & mgr	Sanroft	A. J. Dolacchal	S. & G. O.	Test.
444	Fenton	Fenton Creamery Co.	Co-op	F. O. Newel, Sec.	Fenton	H. W. Pettibone	Separator	Test.
445	Germania	Germania Co-op Creamery Co.	Co-op	Peter Graves, Sec.	Germania	John Landborg	S. & G. O.	Test.
446	Irvington	Irvington Co-op Creamery Co.	Co-op	Wester Bros. Prop.	Irvington	R. Weeter	S. & G. O.	Test.
447	LaVerne	LaVerne Co-op Creamery Co.	Co-op	A. P. Ives, sec.	LaVerne	August Nurrell	S. & G. O.	Test.
448	Lone Rock	Lone Rock Co-op Creamery Co.	Co-op	R. W. Hanna, Sec.	Lone Rock	W. H. Roney	S. & G. O.	Test.
449	Lone Rock	Lone Rock Co-op Creamery Co.	Co-op	H. J. McChesney, Sec.	Lone Rock	J. T. Hanna	S. & G. O.	Test.

449	Ledyard	Farmers Co-op Creamery Assn	Co-op	E. J. Skinner, Sec	Ledyard	Henry M. Dyer	S. & G. C	Test.
450	Ringsted	Seneca Co-op Creamery Co	Co-op	Philip Ekholm, Sec	Fenton, R. F. D. 1	August Johnson	S. & G. C	Test.
451	Sixton	Saxton Creamery	Indiv.	Webster Bros., Props	Hobart	H. F. Jones	S. & G. C	Test.
452	St. Benedict	Farmers Co-op Creamery Co	Co-op	Leo J. Wegman, Sec	St. Benedict	H. F. Domayer	S. & G. C	Test.
453	Bode	St. Joseph Co-op Creamery Co	Co-op	E. C. Clark, Sec	Jode R. F. D. 1	Chris Bogh	S. & G. C	Test.
454	Swea City	Swea City Co-op Creamery Co	Co-op	Wm. Korrek, Sec	Swea City	B. S. Nelson	S. & G. C	Test.
455	Titonka	German Valley Co-op Creamery Co	Co-op	Herman Nelson, Sec	Titonka	Ben Frank	S. & G. C	Test.
456	Lone Rock	Lotts Creek Co-op Creamery Co	Co-op	Aug Boeticher, Sec	Lone Rock R. 1	Mark Dyer	Separator	Test.
457	Whitemore	Whitemore Co-op Creamery Co	Co-op	H. P. Hatch, Sec	Whitemore	A. M. Whitney	S. & G. C	Test.
458	West Bend	Whitemore Creamery Co	Stock	J. M. Borde, Sec	West Bend	A. O'Neil	Separator	Test.
459	Wesley	Wesley Creamery	Indiv.	Wesley Bros. Props	Hobart	H. F. Hollenbeck	Gath. Or.	Test.
460	LEE COUNTY.							
460	New Keokuk	The S. P. Pond Co.	Stock	C. S. Pond, V. P. & Gen mgr	Keokuk		Hand Sep	Test.
461	LINN COUNTY.							
461	Anamosa	Blk Creamery	Indiv.	C. L. Perry, Prop	Anamosa	C. L. Perry	S. & G. C	Test.
462	Central City	Central City Creamery	Indiv.	P. W. Sawyer, Prop	Central City	P. W. Sawyer	S. & G. C	Test.
463	Coggon	Valley Farm Creamery	Indiv.	P. G. Henderson, Prop	Central City	St. Elmo Wright	Separator	Test.
464	Coggon	Coggon Creamery	Co-op	J. J. McAreay, Prop	Coggon	J. J. McAreay	S. & G. C	Test.
465	North Side	North Side Creamery	Co-op	W. H. Trefz	Coggon	Fred Lehman	Hand sep.	Test.
466	Garler-Barth Co.	Garler-Barth Co.	Stock	A. J. Barth, Sec. & Treas	Cedar Rapids	C. C. McOne	S. & G. C	Test.
467	Center Point	Center Point Creamery	Indiv.	J. W. Deffinger, Prop	Center Point	C. M. Flosser	S. & G. C	Test.
468	Ely & W. Western Creamery Co.	Ely & W. Western Creamery Co.	Co-op	Frank J. Dolenz, Sec	Ely, R. F. D. 1	Frank Vavrook	S. & G. C	Test.
469	Ely & W. Western Creamery Co (s)	Ely & W. Western Creamery Co (s)	Co-op	Frank J. Dolenz, Sec	Ely, R. F. D. 1	O. E. Batchelder	S. & G. C	Test.
470	Springville	Springville Creamery	Indiv.	C. E. Batchelder, Prop	Springville	J. M. Tupper	S. & G. C	Test.
471	Springville	Springville Creamery (s)	Indiv.	C. E. Batchelder, Prop	Springville	G. R. Hemenway	Separator	Test.
472	Troy Mills	Troy Mills Creamery	Indiv.	J. M. Tupper, Prop	Troy Mills	H. O. Hemenway	Separator	Test.
473	Waubesa	Waubesa Creamery	Co-op	John Tehl, Sec	Waubesa	W. D. Romine	S. & G. C	Test.
474	Waubesa	Waubesa Creamery	Indiv.	Bates & Hemenway, Pro.	Waubesa	H. R. Bullis	Hand sep.	Test.
475	Viola	Viola Creamery	Indiv.	H. J. Nietert, Prop	Viola		Hand sep.	Test.
476	Viola	Viola Creamery	Indiv.	W. S. Romine, Prop	Viola		Hand sep.	Test.
477	Princeton	Diamond Creamery Co. (s)	Indiv.	C. W. Simpson, Mgr	Monticello		Hand sep.	Test.
478	Cedar Rapids	Cedar Rapids Crm. & Butter Co	Indiv.	F. W. Beyer, Prop	Cedar Rapids		Hand sep.	Test.
479	Cedar Rapids	Iowa Creamery Co.	Stock	A. E. Thompson, Sec. & Tre	Cedar Rapids		Hand sep.	Test.
480	LUCAS COUNTY.							
480	Derby	Cold Colony Creamery (s)	Indiv.	James L. Humphrey Jr, prop	Humeston		S. & G. C	Test.
481	LYON COUNTY—							
481	George	The George Creamery	Indiv.	H. P. Jennings, Proprietor	George	Peter Peterson	S. & G. C	Test
482	Little Rock	Little Rock Mt. Co-op. Cr. Ass'n	Co-op.	R. E. Steasel, Sec. & Mgr.	Little Rock	O. W. Dabbs	Gath. Or.	Test

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separators or Creams gathered or	Method of receiving milk.
<b>MARASKA COUNTY</b>								
483	New Sharon.....	New Sharon Separator Cre'm'y	Stock.	W. J. Nicholson, Sec.	New Sharon.....	Harry Martin.....	S. & G. C.	Test
484	Oskalocosa.....	Oskalocosa Creamery Co.....	Stock.	John Metzger, Manager.	Oskalocosa.....	.....	Gath. Cr.	Test
<b>MARION COUNTY</b>								
485	Pella.....	Pella Creamery Co.....	Stock.	D. R. Rhynebarger, Mgr.	Pella.....	T. Smorenburg	S. & G. C.	Test
486	Pallas.....	Beatrice Creamery Co. (s).....	Stock.	V. A. Leighton, Manager.	Des Moines.....	.....	Gath. Cr.	Test
<b>MARSHALL COUNTY</b>								
487	Clemons.....	Minerva Valley Creamery Ass'n	Co-op.	H. P. Clemons, Sec.	Clemons.....	G. R. Jackman.	Gath. Cr.	Test
488	Dunbar.....	Dunbar Creamery Co.....	Co-op.	O. J. Olson, Sec. and Mgr.	Dunbar.....	U. O. Bombberger.	Separator	Test
489	Liscomb.....	Liscomb Cheese Co.....	Stock.	Thos. E. Culp, Sec.	Liscomb.....	Thos. E. Culp.....	Gath. Cr.	Test
490	State Center.....	State Center Farmers' Orass'n	Co-op.	O. Hansen, Manager	State Center.....	G. T. Shaunce.....	Gath. Cr.	Oil Test
491	New St. Anthony	Farmers' Creamery Co.....	Co-op.	T. A. Davenport, Sec.	St. Anthony.....	G. R. Price.....	Gath. Cr.	Test
<b>MILLS COUNTY</b>								
492	Waterloo.....	Waterloo Creamery Co.....	Stock.	Leroy Corlies.....	Council Bluffs.	.....	Grib. Cr.	Test
493	Silver City.....	Waterloo Creamery Co.....	Stock.	Leroy Corlies.....	Council Bluffs.	.....	Gath. Cr.	Test
<b>MITCHELL COUNTY</b>								
494	David.....	David Co-op. Creamery Co.....	Co-op.	F. M. Griffin, Sec.	David.....	M. Fairbrother.	Gath. Cr.	Test
495	Osgo.....	Rock Creek Co-op. Cr'm'y Ass'n	Co-op.	H. L. Johnson, Sec.	Radd.....	Sig Klemmerud.	Gath. Cr.	Oil Test
496	Orchard.....	Farmers' Co-op. Cream'y Ass'n	Co-op.	H. W. Clay, Sec. and Mgr.	Orchard.....	M. M. Blandin..	Gath. Cr.	Oil Test
497	Riceville.....	Riceville Co-op. Cream'y Ass'n	Co-op.	F. J. Carpenter, Sec.	Riceville.....	A. B. Grover.....	Gath. Cr.	Test
498	Stacyville.....	Stacyville Creamery.....	Indiv	J. B. Spensley, Proprietor.	Stacyville.....	J. B. Spensley..	S. & G. C.	Test
499	St. Ansgar.....	Farmers' Co-op. Cream'y Co.	Co-op.	J. M. Tollefson, Sec. & Mgr.	St. Ansgar.....	B. Uliff.....	Gath. Cr.	Test
500	Tooeville.....	Tooeville Co-op. Cream'y Co.	Co-op.	L. C. Baker, Sec.	Tooeville.....	A. M. Nofland..	Hand sep.	Test
501	New Haven.....	Farmers' Co-op. Cream'y Co.	Co-op.	Fred C. Sheldon, Sec.	Elma.....	D. C. Thomas..	Gath. Cr.	Oil Test
502	Osgo.....	Osgo Co-op. Creamery Ass'n.	Co-op.	John Torslett, Sec.	Mitchell.....	George Halfter..	Gath. Cr.	Test

MONONA COUNTY—	Indiv. P. D. Nelson, Proprietor	Moorhead.	P. D. Nelson	Gath. O.	Test.
503 Moorhead.....	Indiv. P. D. Nelson, Proprietor	Moorhead Creamery.....			
MONROE COUNTY—					
504 Albion.....	Indiv. Elder & Elder, Proprietors	Albia Creamery.....	W. A. Elder	S. & G. C.	Test.
MUSCATINE COUNTY—					
505 Wilton Junction.....	Indiv. Geo. W. Kelley, Proprietor	Nickel Plate Creamery.....	E. E. Hesson	Gath. Or.	Test.
506 West Liberty.....	Indiv. B. L. Clark, Secretary	Iowa Condensed Milk Factory		Milk.	Test.
O'BRIEN COUNTY—					
507 Germantown.....	Stock. Fred Hoeckmann, Sec.	Caledonia Creamery Co.....	Wm. Gehrls	S. & G. C.	Test.
508 Hartley.....	Indiv. A. D. Rozeboom, Prop.	Hartley Creamery.....	W. Webster	Gath. Or.	Test.
509 Pringhar.....	Indiv. A. W. Hubbard, Manager	Hubbard, Bristol & Co.....	Geo. Bristol	Gath. Or.	Test.
510 Sheldon.....	Indiv. D. A. Miller, Proprietor	Sheldon Creamery.....	M. Hauer	Hand Sep.	Test.
511 Paulina.....	Stock. Wm. Strampe, Secretary	Union Creamery Co.....	W. Strampe	S. & G. C.	Test.
OSCEOLA COUNTY—					
513 Ashton.....	Indiv. Kramer & Davis, Props	Ashton Creamery.....	C. W. Davis	S. & G. C.	Test.
513 Sibley.....	Indiv. C. A. Smith, Proprietor	Sibley Creamery.....	Dick Cosgrove	Hand Sep.	Test.
514 Allendorf.....	Co-op. A. Klampe, Secretary	Allendorf Creamery.....		Gath. Or.	Test.
PAGE COUNTY—					
515 Clarinda.....	Stock. W. T. S. White, Secretary	Clarinda Poultry, Butter & Egg Company.....	Herman Beck	Hand Sep.	Test.
PALO ALTO COUNTY—					
516 Ayshire.....	Co-op. C. H. Hookham, Sec.	Silver Lake Creamery Co.....	Fred Shellman	Separator	Test.
517 Cylinder.....	Co-op. Theo. DeMouth, Secretary	Cylinder Butter & Cheese Assn.	E. P. Conrad	Separator	Test.
518 Curlew.....	Co-op. J. H. McCreary, Secretary	Rush Lake Creamery Co.....	S. R. Stratton	Separator	Test.
519 Emmetsburg.....	Stock. Lewis Struchmer, Secretary	Emmetsburg Creamery Co.....	N. H. Knudsen	Separator	Test.
520 Fairville.....	Co-op. Jos. Kliegl, Secretary	Fairville Creamery Co.....	W. D. Kucker	Separator	Test.
521 Graettinger.....	Co-op. Lars. O. Christenson, Sec	Lost Island Creamery Co.....	J. N. Bruok	Separator	Test.
522 Mallard.....	Co-op. T. C. Truog, Secretary	Mallard Butter & Cheese Assn	J. W. Finnell	S. & G. C.	Test.
523 Graettinger.....	Co-op. F. L. Lambe, Secretary	Farmers Co-op Creamery Co.....	W. W. Bond	Separator	Test.
524 Osgood.....	Co-op. G. C. Thompson, Secretary	Osgood Creamery Co.....	Edgar Chadwick	Separator	Test.
525 Graettinger.....	Co-op. Seth. A. Smith, Secretary	Palo Alto Creamery Co.....	W. A. Thayer	Separator	Test.
526 Ruthven.....	Co-op. Chas. E. Yocum, Secretary	Farmers Co-op. Creamery Co.	A. L. Remington	S. & G. C.	Test.
527 Rodman.....	Co-op. C. J. Frye, Secretary	Rodman Co-op. Creamery Co.	C. M. Vohs	S. & G. C.	Test.
528 West Bend.....	Co-op. G. W. Brown, Sec. & Mgr.	West Bend Co-op. Creamery Co.	Thos. A. Clarke	S. & G. C.	Test.
529 West Bend.....	Co-op. Wm. Reardon, Sec. & Mgr.	Euclid Co-op. Creamery Co.....	Chas. Kanuteon	S. & G. C.	Test.

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Pasteurizer or cream.	Method of receiving milk.
<b>PLYMOUTH COUNTY—</b>								
530	Kingsley .....	Paynes Creamery .....	Indiv.	Payne Bros., Proprietors .....	Kingsley, Bx A .....	Ira Stewart .....	Hand Sep .....	Test.
531	Mammon .....	Grant Township Creamery Co. ....	Co-op.	H. F. Maust, Secretary .....	Struble .....	J. Kennedy .....	S. & G. C. .....	Test.
532	Mammon .....	Farmers M. Co-op. Creamery Co. ....	Co-op.	Frank Jeffers, Secretary .....	Struble .....	Wm. Anderson .....	S. & G. C. .....	Test.
533	Merrill .....	Hanford Produce Co. (s) .....	Stock	J. H. Whittemore, Sec. ....	Sioux City .....	.....	Hand Sep .....	Test.
534	LeMars .....	Hanford Produce Co. (s) .....	Stock	J. H. Whittemore, Sec. ....	Sioux City .....	.....	Hand Sep .....	Test.
<b>POCAHONTAS COUNTY—</b>								
535	Laurens .....	Laurens Creamery .....	Indiv.	W. & J. G. Hinn, Props. ....	Laurens .....	F. W. Johnson .....	Hand Sep .....	Test.
536	Pomeroy .....	Hanford Produce Co. (s) .....	Stock	J. H. Whittemore, Sec. ....	Sioux City .....	.....	S. & G. C. .....	Test.
537	Plover .....	Plover Creamery Co. ....	Stock	H. Fitzgerald, Manager .....	Plover .....	Geo. Heathman .....	Hand Sep .....	Test.
538	Pocahontas .....	Pocahontas Creamery .....	Indiv.	W. & G. Hinn, Props. ....	Laurens .....	S. E. Lybarger .....	Hand Sep .....	Test.
539	Boile .....	Gilt Edge Creamery .....	Indiv.	W. R. Rogers, Proprietor .....	Boile .....	W. R. Rogers .....	S. & G. C. .....	Test.
<b>POLK COUNTY—</b>								
540	Des Moines .....	Beatrice Creamery Company .....	Stock	F. A. Leighton, Manager .....	Des Moines .....	Mcervin Powers .....	Hand sep. ....	Test
541	Grimes .....	Grimes Butter & Cheese Co. ....	Stock	W. J. Steward, Secretary .....	Grimes .....	A. L. Rosenberg .....	Sep. ....	Test
542	Campbell .....	Grimes Butter & Cheese Co. (s) .....	Stock	W. J. Steward, Secretary .....	Grimes .....	S. & G. C. .....	S. & G. C. .....	Test
543	Des Moines .....	Des Moines Creamery Company .....	Stock	B. S. Schermerhorn, Pres. ....	Des Moines .....	W. S. Gould .....	Hand sep. ....	Test
544	Des Moines .....	Capital Creamery Company .....	Stock	K. Koller, J. Bell, Manager .....	Des Moines .....	R. S. Blood .....	Hand sep. ....	Test
545	Des Moines .....	Crystal Spring Creamery Co. ....	Indiv.	Mac Rae Bros., Proprietors .....	Des Moines .....	Wm. McWilliam .....	Hand sep. ....	Test
<b>POTTAWATTAMIE COUNTY—</b>								
546	Avoca .....	Avoca Creamery .....	Indiv.	P. T. Hanson, Proprietor .....	Avoca .....	M. Larsen .....	Hand sep. ....	Test
547	Walnut .....	Parlie Rose Creamery Co. (s) .....	Co-op.	J. D. Lorentzen, Secretary .....	Walnut .....	.....	Sep. ....	Test
548	Conrad Bluffs .....	Waterloo Creamery Company .....	Stock	Leroy Corliss, Vice-Pt. & Mgr. ....	Omaha, Neb. ....	A. O. Zimmerman .....	S. & G. C. .....	Test
549	Underwood .....	Waterloo Creamery (s) .....	Stock	Leroy Corliss, Vice-Pt. & Mgr. ....	Omaha, Neb. ....	.....	S. & G. C. .....	Test
550	Minden .....	Waterloo Creamery Co (s) .....	Stock	Leroy Corliss, Vice-Pt. & Mgr. ....	Omaha, Neb. ....	.....	S. & G. C. .....	Test
551	Minden .....	Minden Creamery .....	Indiv.	N. P. Jorgensen, Proprietor .....	Minden .....	N. P. Jorgensen .....	.....	Test

POWESHIEK COUNTY—		UNTY—									
553	Guernsey	.....	Indiv.	John Newman Company	.....	Elgin, Ill.	.....	O. W. Hicks	.....	S. & G. C.	Test
554	Grinnell	.....	Indiv.	J. W. Fowler, Proprietor	.....	Grinnell	.....	Chas. Woodwise	.....	Gath. Or.	Test
555	Brooklyn	.....	Indiv.	J. W. Fowler, Proprietor	.....	Grinnell	.....	.....	.....	Gath. Or.	Test
556	Searsboro	.....	Indiv.	J. W. Fowler, Proprietor	.....	Grinnell	.....	.....	.....	Gath. Or.	Test
557	Hartwick	.....	Indiv.	John Newman Company	.....	Elgin, Ill.	.....	Wm. Thies	.....	S. & G. C.	Test
558	Montezuma	.....	Indiv.	John Newman Company	.....	Elgin, Ill.	.....	John Oane	.....	Gath. Or.	Test
SAO COUNTY—											
559	Early	.....	Indiv.	Charles A. Dermo, Prop.	.....	Early	.....	O. A. Dermo	.....	S. & G. C.	Test
560	Herring	.....	Indiv.	J. P. Wright Prop.	.....	Herring	.....	M. W. Wright	.....	S. & G. C.	Test
561	Lake View	.....	Indiv.	J. P. Thorkelsen, Prop.	.....	Lake View	.....	O. B. Holliday	.....	S. & G. C.	Test
562	Delaware Center Creamery Co.	.....	Co-op.	Clark N. Bearle, Secretary	.....	Nemaha	.....	M. M. Lewis	.....	S. & G. C.	Test
563	Farmers Creamery Company	.....	Stock	J. A. Cranston, Secretary	.....	Odebolt	.....	Ed McFarland	.....	S. & G. C.	Test
564	Schaller Creamery	.....	Indiv.	Perry Rubendall, Prop.	.....	Schaller	.....	Perry Rubendall	.....	Hand Sep.	Test
565	Eden Creamery Company	.....	Co-op.	Albert Zenke, Secretary	.....	Schaller	.....	M. P. O'Grady	.....	Hand Sep.	Test
566	Wall Lake Creamery	.....	Indiv.	Thos. A. Hern, Proprietor	.....	Wall Lake	.....	D. A. Provost	.....	S. & G. C.	Test
SCOTT COUNTY—											
567	Long Grove	.....	Indiv.	J. M. Merriott, Prop.	.....	Long Grove	.....	J. W. Blair	.....	Gath. Or.	Test
568	Davenport	.....	Stock	F. A. Waugh, Sec.	.....	Davenport	.....	H. D. Wendt	.....	Hand Sep.	Test
SHELBY COUNTY—											
569	Corley	.....	Co-op.	A. C. Dineen, Sec.	.....	Avoca	.....	W. F. Pettes	.....	Hand Sep.	Test
570	Earling	.....	Stock	O. E. Leitch, Sec.	.....	Earling	.....	S. F. Stephany	.....	Hand Sep.	Test
571	Harian	.....	Co-op.	R. Ramtussen, Sec.	.....	Harian	.....	P. Jensen	.....	Hand Sep.	Test
572	Rockonville	.....	Co-op.	S. C. Ramtussen, Secretary	.....	Harian, R. No. 6	.....	P. Nymann	.....	Separator	Test
573	Kirkman	.....	Indiv.	Peter R. Andersen, Prop.	.....	Kirkman, R. No. 1	.....	Julius Anderson	.....	S. & G. C.	Test
574	Rickborn	.....	Indiv.	N. A. Sorenson, Prop.	.....	Marne, R. No. 1	.....	Chris Tomson	.....	Hand Sep.	Test
575	Portsmouth	.....	Co-op.	J. A. Lorensen, Sec.	.....	Portsmouth	.....	M. Aarsterne	.....	Hand Sep.	Test
576	Walnut	.....	Stock	L. Corlius, Vice P. & Mgr.	.....	Walnut, R. No. 3	.....	Chris Beck	.....	Separator	Test
577	Shelby	.....	Stock	Waterloo Creamery Co. (S)	.....	Omaha, Neb.	.....	.....	.....	S. & G. C.	Test
STOIX COUNTY—											
578	Alton	.....	Indiv.	Geo. R. Mueller, Prop.	.....	Alton	.....	Geo. H. Mueller	.....	Hand Sep.	Test
579	Granville	.....	Stock	J. H. Whittemore, Sec.	.....	Sioux City	.....	.....	.....	S. & G. C.	Test
580	Hesper	.....	Indiv.	Stoaver & Botherman, Prop.	.....	Hesper	.....	Emil Zoar	.....	Gath. Or.	Test
581	Hawarden	.....	Indiv.	Mueller Bros. Props	.....	Hawarden	.....	Mike Flech	.....	Hand Sep.	Test
582	Hull	.....	Indiv.	Rad Stenavad, Prop.	.....	Hull	.....	J. L. Curtis	.....	Hand Sep.	Test
583	Rock Valley	.....	Indiv.	G. H. Der, Proprietor	.....	Rock Valley	.....	John L. Clark	.....	Hand Sep.	Test
584	Jefferhuis & Co.	.....	Indiv.	Rad Stenavad, Prop.	.....	Hull	.....	R. DenHarder	.....	Hand Sep.	Test
585	Inwood	.....	Co-op.	L. M. Foot, Sec. & Mgr.	.....	Inwood	.....	H. C. Nelson	.....	Gath. Or.	Test

## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Gathered cream.	Method of re-ceiving milk.
<b>STORY COUNTY</b>								
585	Ames	Iowa State College	Indiv.	G. L. McKay	Ames	J. F. Barrette	S. & G. C.	Test.
586	Cambridge	Cambidge Farm's Co-op Crm Co	Co-op	M. F. Ding, Secretary	Cambridge	T. & G. C.	S. & G. C.	Test.
587	Closed							
588	Gilbert Station	Farmers Co-op Creamery Co	Co-op.	C. P. Lake, Manager	Hilbert Station	C. P. Lake	S. & G. C.	Test.
589	Huxley	Huxley Farmers Co-op Crm Co.	Co-op.	A. H. Shedd, Sec	Huxley	Geo. Wick	Separator	Test.
590	Roland	Roland Farmers Creamery Co.	Co-op.	A. T. Olson, Secretary	Roland	Geo. Wick	Separator	Test.
591	Story City	Story C. Farmers Co-op Crm Co.	Co-op.	Alex Henderson, Sec	Story City	E. J. Severald	Separator	Test.
592	Slater	Slater Farmers Co-op Crm Co.	Co-op.	Andrew Maland, Sec	Slater	R. T. Naa	Separator	Test.
593	Zearing	Zearing Creamery Co.	Stock	C. F. Bean, Secretary	Zearing	R. R. Hadley	S. & G. C.	Test.
<b>TAMA COUNTY</b>								
594	Chelsea	Springbrook Creamery	Indiv.	John Newman 70.	Elgin, Ill	John Bacher	S. & G. C.	Test
595	Hibron	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill	Olus Bacher	S. & G. C.	Test
596	Tama	Tama Co-op Creamery Co	Co-op.	L. I. Olson, Sec	Tama	W. H. Graham	Hand sep.	Test
597	Clutier	Clutier Creamery	Indiv.	E. D. Armstrong, Propr.	Clutier	E. D. Armstrong	Gala. Cr.	Test
<b>TAYLOR COUNTY</b>								
598	Tearfield	Clearfield Creamery Co	Stock	Joe Donbet, Sec	Clearfield	George McNair	Hand sep.	Test
599	Bedford	The Bedford Creamery	Indiv.	Frank Dunning, Proprietor	Bedford	Lealie Klopp	Hand sep.	Test
600	Lenox	Lenox Creamery Co	Co-op.	J. L. Jacoby, Secretary	Lenox		S. & G. C.	Test
<b>UNION COUNTY</b>								
601	Treton	Clarinda Poultry, Butter and Egg Co.	Stock	W. T. S. White, Sec'y	Clarinda	J. C. Hall	Hand sep.	Test
<b>VAN BUREN COUNTY</b>								
602	Bonaparte	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec	Ottumwa		Gath. Cr.	Test
603	Milton	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec	Ottumwa		Gath. Cr.	Test
604	Stockport	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec	Ottumwa		Gath. Cr.	Test

[illegible]

## CREAMERY LIST--CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or Refined cream.	Method of receiving milk.
635	Nordness	Nordness Creamery Co.	Stock.	J. N. Bragstad, Sec. & Mgr.	Nordness	Knut Hauge	Hand sep.	Oil Test
636	Nordness	Red Oak Creamery Co.	Co-op.	N. E. Ramsey, Secretary	Decorah	Hans Fos.	Gath. Or.	Oil Test
637	Oslan	Silver Springs Creamery Co.	Stock.	M. J. Nicholson, Sec. & Mgr.	Decorah, R. D. 2	Ole Hauge	Gath. Or.	Oil Test
638	Ridgeway	L. T. Foese & Sons Creamery.	Indiv.	O. A. Foese, Secretary	Ridgeway	O. A. Foese	Gath. Or.	Oil Test
639	Ridgeway	Lincoln Fms' Co-op. Cr'y Ass'n	Co-op.	A. W. Prann, Secretary	Ridgeway	G. A. Bakken	Gath. Or.	Oil Test
	WOODBURY CO	UNTY--						
640	Correctionville	Hopkins & Hubbard Creamery	Indiv.	Hopkins & Hubbard, Props.	Correctionville	M. J. Goodnow	Hand Sep	Test.
641	Sioux City	Hanford Produce Co.	Stock	J. H. Whittemore, Sec'y	Sioux City	W. O. Wheelock	Hand Sep	Test.
	WORTH COUNTY							
642	Fertile	Fertile Co-op. Dairy Co.	Co-op.	J. T. Tallackson, Secretary	Fertile	J. A. Johnson	S. & G. C.	Test.
643	Joice	Nordland Creamery Co.	Co-op.	P. R. Hammer, Secretary	Joice	A. H. Nelson	Separator	Test.
644	Kensett	Danville Creamery Co.	Co-op.	M. O. Bray, Secretary	Kensett	Gilbert Olson	S. & G. C.	Test.
645	Manly	Farmers Co-op. Creamery Co.	Co-op.	E. R. Stock, Secretary	Manly	H. E. Ford	S. & G. C.	Test.
646	Meltonville	Lorenzen Bros. Creamery	Indiv.	Lorenzen Bros., Proprietors	Meltonville	N. E. Lorenzen	Gath. Or.	Oil Test
647	Northwood	Farmers Butter & Cheese Ass'n	Co-op.	M. D. Johnson, Secretary	Northwood	R. S. Bergsather	S. & G. C.	Test.
648	Northwood	Hartland Dairy Association	Stock	E. L. Loberg, Secretary	Northwood R. 8	R. A. M. Hansen	Separator	Test.
649	Northwood	Brookfield Creamery Ass'n	Co-op.	J. A. Tenold, Sec. & Mgr.	Northwood	A. C. Talle	S. & G. C.	Test.
650	Bristol Townshp	Lake Mills Creamery Co (s)	Co-op.	J. A. Horvel, Secretary	Northwood		Separator	Test.
651	Tenold	Tenold Creamery	Indiv.		Lake Mills		Gath. Or.	Test.
	WRIGHT COUNTY							
652	Belmond	Norway Co-op. Creamery Co.	Co-op.	O. J. Baxter, Secretary	Belmond R.F.D. 2	C. H. Vanderham	Hand Sep	Oil Test
653	Clarion	Clarion Creamery Association	Co-op.	O. P. Morton, Secretary	Clarion	B. W. Umbreit	Gath. Or.	Oil Test
654	Goldfield	Fountain Creamery	Indiv.	DeWitt Goodrich, Prop.	Goldfield	John Beck	Hand Sep	Test.
655	Galt	Galt Creamery Co.	Co-op.	A. K. Ketchum, Secretary.	Galt	A. Faltland	S. & G. C.	Test.

## IOWA CHEESE FACTORY LIST.

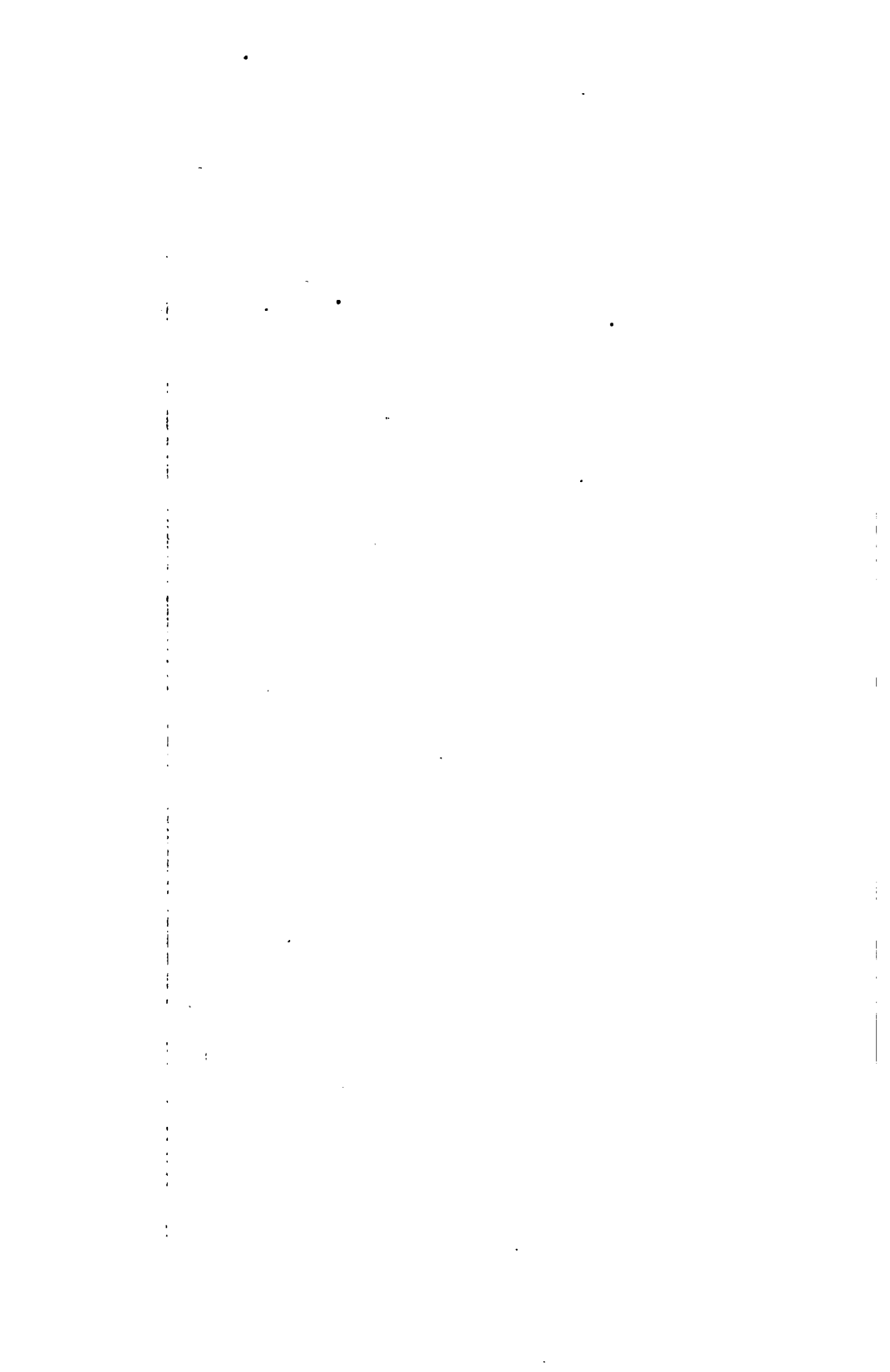
Alphabetically Arranged According to Counties and Towns Near Which Factory is Located, Together with Information Pertaining to Each.

Office record number.	Located at or Near.	Name of Cheese Factory.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Cheese Maker.	Method of testing milk.
1	BENTON COUNTY— Atkins .....	Ideal Cheese Factory.....	Indiv. . .	A. O. Stewart, Proprietor..	Atkins . . . . .	A. O. Stewart..	Hundred.
	BLACK HAWK COUNTY— BANNER COUNTY—						
2	Janesville.....	The Fowler Co.....	Stock...	Geo. V. Fowler, Manager..	Waterloo .....	J. McMurray ....	Test.
3	OSCEOLA COUNTY— Burchinal.....	Osceola Cheese Factory.....	Indiv. . .	T. E. Coates, Proprietor..	Burchinal.....	T. E. Coates....	Test.
4	CRAWFORD COUNTY— Astor. ....	Astor Cheese company.....	Indiv. . .	O. A. Olson, Proprietor ..	Astor .....	Arthur William.	Hundred.

## IOWA CHEESE FACTORY LIST—CONTINUED.

Office record number.	Located at or Near.	Name of Cheese Factory.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Cheese Maker.	Method of receiving milk.
	CLARK COUNTY—						
5	Weldon .....	Weldon Cheese Factory .....	Indiv. . .	L. M. Parr, Proprietor . .	Weldon .....	L. M. Parr. ....	Hundred.
	FLOYD COUNTY—						
6	Charles City .....	Elm Springs Factory .....	Indiv. . .	H. D. White, Proprietor	Charles City .....	Walter B. Pfeiffer	Hundred.
	GREENE COUNTY—						
7	Dana .....	Dana Mutual Co-op. Firm, Company	Co-op. . .	W. J. Elling, Secretary . .	Dana .....	W. J. Elling. ....	Test
	GUTHRIE COUNTY—						
8	Jamaica .....	Jamaica Cheese Factory .....	Indiv. . .	Goreham & Coon, Props. . .	Jamaica .....	W. E. Goreham	Hundred.
	HARDIN COUNTY—						
9	Iowa Falls .....	Ellis Cheese Factory .....	Indiv. . .	W. I. Clark, Proprietor	Iowa Falls, B. & B. 18	W. I. Clark. ....	Hundred.
	HOWARD COUNTY—						
10	Creco .....	Creco Cheese Factory .....	Indiv. . .	Wm. Kellow .....	Creco .....	W. M. Lathrop. .	Hund.
11	Creco .....	Claver Leaf Cheese Factory . .	Indiv. . .	J. J. House .....	Creco .....	J. J. House .....	Hund.
	HENRY COUNTY—						
12	Noble .....	The Christner Butter and Cheese Co	Indiv. . .	O. O. Christner .....	Wayland .....	O. O. Christner. .	Test.
	JEFFERSON COUNTY—						
13	Pleasant Plain ..	Pleasant Plain Cheese Factory ..	Indiv. . .	J. H. Sweeney .....	Pleasant Plain ..	Fred L. Reynolds	Test.
14	Veo .....	Veo Cheese Factory .....	Stock ..	E. A. Hoiler .....	Pleasant Plain ..	H. W. Spencer. .	Test.

15	KEOKUK COUNTY— Talleyrand .....	Talleyrand Factory .....	Stock ..	L. M. Tucker, Secretary ..	Talleyrand .....	Olifton Tucker ..	Test.
16	LIN COUNTY— Franklin Station ..	Franklin Station Cheese Company ..	Stock ..	Chas. Klingler .....	Donnellson .....	A. W. Newell ..	Test.
17	MONROE COUNTY— Albia .....	Bone Cheese Factory .....	Indiv. ....	S. G. Bone, Proprietor ..	Albia ..	S. G. Bone .....	Hund.
18	MARSHALL COUNTY— Liscomb .....	Liscomb Cheese Company .....	Stock ..	Thomas E. Oulp, Manager ..	Liscomb ..	Thos. E. Oulp ..	Test.
19	MUSCATINE COUNTY— Wilton Junction ..	Muscantine French Cheese Company ..	Co-op ..	Fritz Kolb, Secretary .....	Wilton Junction ..	Homer Carson ..	Hund.
20	POWESHIEK COUNTY— Jacobs .....	Jacob Cheese Factory .....	Indiv. ....	A. C. Payne, Proprietor ..	Jacobs ..	S. M. Payne ..	Test.
21	SCOTT COUNTY— Princeton .....	Wapsie Cheese Factory .....	Stock ..	Chas. A. Pope .....	Princeton ..	Perry E. Bower & O. A. Hope ..	Test.
22	STORY COUNTY— Ames .....	I. A. C. Cheese Factory .....	State ..	G. L. McKay, Manager ..	Ames ..	.....	Test.
23	TAYLOR COUNTY— Sharpsburg .....	Sharpsburg Cheese Company .....	Indiv. ....	G. S. Eastlack, Proprietor ..	Sharpsburg ..	G. S. Eastlack ..	Hund.
24	.....	Stockton Cheese Factory .....	Indiv. ....	Wadrip & Bonafeld, Props ..	Stockton ..	Wadrip & Bonafeld ..	Hund.
25	WASHINGTON COUNTY— West Chester .....	Least Cheese Factory .....	Indiv. ....	W. E. Leet, Proprietor ..	West Chester ..	W. E. Leet .....	Hund.
26	.....	Clay Cheese Factory .....	Stock ..	E. A. Meschman, Sec. ....	Richard, R. 2 ..	W. J. Abeer .....	Test.
27	WAYNE COUNTY— Sewall .....	Sewall Cheese Manufacturing Co. ....	Stock ..	Ira Bantz, Secretary .....	Sewall ..	Samuel Bantz ..	Hund.
28	.....	Liserville Cheese Factory .....	Indiv. ....	Melrose, Delia ..	Liserville ..	Melrose Delia ..	Hund.
29	.....	Seymour Cheese Company .....	Stock ..	E. A. Weagley, Secretary ..	Seymour ..	E. A. Spencer ..	Hund.



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**REPORT**

**OF THE**

**Inspectors of Steamboats**

**TO THE**

**GOVERNOR OF IOWA**

---

GEO. B. FREEMAN	}	BOAT INSPECTORS
J. W. CHAPEL		
ALONZO A. JENKS		
J. B. THOMPSON		

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**PRINTED BY ORDER OF THE GENERAL ASSEMBLY**

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**DES MOINES:**  
**BERNARD MURPHY, STATE PRINTER**  
1905



MASON CITY, IOWA, December 16, 1904.

HON. ALBERT B. CUMMINS, *Governor*,  
Des Moines, Iowa.

DEAR SIR—I have the honor to submit herewith my annual report as Inspector of Boats for the year 1904.

Yours truly,

GEO. B. FREEMAN,  
*Inspector of Boats.*

# LICENSES GRANTED FOR BOATS.

## J. F. YOUNGLOVE BOAT COMPANY, CLEAR LAKE.

Date.	Kind of Vessel.	Name.	Passengers.	Fee.
April 26, 1904	Gasboat .....	Id-al. ....	80	\$10

## OSCAR STEVENS BOAT COMPANY, CLEAR LAKE.

April 26, 1904	Sailboat .....	Duck .....	15	\$ 1
	Sailboat .....	Gull .....	25	1
	Sailboat .....	Swan .....	25	1
	Sailboat .....	Featherstone .....	85	1
	Sailboat .....	Goldie .....	15	1
May 8, 1904	Sailboat .....	Willie .....	12	1
	Steamboat .....	I-land Queen .....	70	10
	Steamboat .....	Iowa .....	70	10

## GREEN & YOUNG BOAT COMPANY, CLEAR LAKE.

May 5, 1904	Sailboat .....	Vincent .....	40	\$ 1
	Sailboat .....	Hope .....	20	1
	Sailboat .....	White Wing .....	20	1
	Sailboat .....	Speed .....	20	1
	Sailboat .....	Winniba .....	12	1
	Sailboat .....	Trilby .....	85	1
	Sailboat .....	Ino .....	12	1
May 23, 1904	Sailboat .....	Challenge .....	85	1
	Steamboat .....	Lady Franklin .....	200	10
May 23, 1904	Steamboat .....	Bird .....	100	10

## F. L. JONES BOAT COMPANY, CLEAR LAKE.

April 23, 1904	Gasboat .....	Tillie B .....	12	\$ 5
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## GEORGE KABINCK BOAT COMPANY, CLEAR LAKE.

April 23, 1904	Sailboat .....	Puritan .....	15	\$ 1
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## REPORT OF BOAT INSPECTORS.

## HOMER W. JOHNSON BOAT COMPANY, CEDAR RIVER.

Date.	Kind of Vessel.	Name.	Passengers.	Fee.
June 27, 1904	Gasboat .....	Georgia .....	16	\$ 5

## W. H. HILL, CLEAR LAKE.

July 4, 1904	Gasboat .....	Iroquois .....	16	\$ 5
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## T. A. KELTY, CEDAR RAPIDS. (CEDAR RIVER.)

May 8, 1904	Steamboat. ....	Parlor City .....	120	\$10
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## POMEROY. (TWIN LAKES.)

April 20, 1904	Steamboat. ....	Princess ....	20	\$ 5
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## H. F. KELLNER, CEDAR RAPIDS. (CEDAR RIVER.)

June 29, 1904	Gasboat .....	Fontanelle .....	25	\$10
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## E. W. HOAG, MANCHESTER. (MAQUOKETA RIVER.)

June 30, 1904	Gasboat .....	Nimrod .....	16	\$ 5
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## RAPID TRANSIT COMPANY, WATERLOO. (CEDAR RIVER.)

June 30, 1904	Gasboat .....	Florence .....	8	\$ 5
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## E. J. CHAPMAN, WATERLOO. (CEDAR RIVER.)

June 30, 1904	Gasboat. ....	Princess .....	10	\$ 5
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## C. C. BOUTTETT, IOWA FALLS. (IOWA RIVER.)

June 16, 1904	Gasboat .....	No. 19 .....	30	\$10
	Gasboat .....	No. 40 .....	30	

## JAMES SAFFORD, LINN SPRINGS. (NORTH IOWA RIVER.)

June 16, 1904	Gasboat .....	Irene .....	10	\$ 5
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## ERICKSON &amp; HORN, LAKE VIEW. (WALL LAKE.)

June 15, 1904	Steamboat .....	Defiance .....	75	\$ 11
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## LARSON BROTHERS, LAKE VIEW. (WALL LAKE.)

June 15, 1904	Steamboat .....	Lakewood .....	250	\$10
	Steamboat .....	Tramp .....	75	10
	Gasboat .....	Runabout .....	40	10
	Sailboat .....	Dispatch .....	25	1
	Sailboat .....	Iowa .....	10	1

## LICENSES GRANTED TO ENGINEERS AND PILOTS.

## CLEAR LAKE.

Date.	Name.	Engineer or Pilot.	Fees
April 26, 1904	J. F. Younglove.....	Pilot.....	\$ 3
	J. F. Younglove.....	Engineer (gas).....	3
June 25, 1904	F. W. Johnson.....	Engineer (steam).....	3
	F. W. Johnson.....	Pilot.....	3
August 6, 1904	Walter Newgard.....	Engineer (steam).....	3
July 8, 1904	W. T. Latimer.....	Pilot.....	3

## IOWA FALLS.

June 16, 1904	Mat Klockels.....	Engineer (gas).....	\$ 3
	Mat Klockels.....	Pilot.....	3

## LINN SPRINGS.

June 16, 1904	James Safford.....	Engineer (gas).....	\$ 3
	James Safford.....	Pilot.....	3

## CHARLES CITY.

June 27, 1904	Homer W. Johnson.....	Engineer (gas).....	\$ 3
	Homer W. Johnson.....	Pilot.....	3

## POMEROY.

April 20, 1904	Ben Brownell.....	Engineer (steam).....	\$ 3
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## CEDAR RAPIDS.

May 3, 1904	T. H. Burdick.....	Engineer (steam).....	\$ 3
Total amount received, 1904.....			\$ 229

MANSON, IOWA, December 31, 1904.

HON. ALBERT B. CUMMINS, *Governor*,  
Des Moines, Iowa.

DEAR SIR—I have the honor to submit herewith my annual report as Inspector of Boats for the year 1904.

J. W. CHAPEL,  
*Inspector of Boats.*

### LICENSES GRANTED FOR BOATS.

#### CASINO AMUSEMENT COMPANY, STORM LAKE.

Date.	Kind of Vessel.	Name.	Passengers.	Fees.
June 23, 1904	Steamboat . . . . .	Queen . . . . .	\$ 65	\$ 10

#### E. E. MACK, STORM LAKE.

July 13, 1904	Sailboat . . . . .	Mac . . . . .	\$ 20	\$ 1
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### LICENSES GRANTED TO ENGINEERS AND PILOTS.

#### STORM LAKE.

Date.	Name.	Engineer or Pilot.	Fees.
June 23, 1904	J. S. McSherry . . . . .	Engineer . . . . .	\$ 3
July 13, 1904	Bert M. Mack . . . . .	Pilot . . . . .	\$ 3
July 13, 1904	Frank W. Mack . . . . .	Pilot . . . . .	\$ 3
Total amount received, 1904 . . . . .			\$ 20

LEON, IOWA, January 18, 1905.

HON. ALBERT B. CUMMINS, *Governor*,  
Des Moines, Iowa.

DEAR SIR—I have the honor to submit herewith my annual report as Inspector of Boats for the year 1904.

ALONZO A. JENKS.  
*Inspector of Boats.*

### LICENSES GRANTED FOR BOATS.

#### DAVIS CITY.

Date.	Kind of Vessel.	Name.	Passengers.	Fees.
May 10, 1904	Gasoline Launch....	Defender .....	20	\$ 5

### LICENSES GRANTED TO ENGINEERS AND PILOTS.

#### DAVIS CITY.

Date.	Name.	Engineer or Pilot.	Fees.
May 10, 1904	E. W. Teal .....	Engineer.....	\$ 8
Oct. 15, 1904	Jas. Lemmer .....	Engineer.....	8
Total amount received, 1904.....			\$ 11

HON. ALBERT B. CUMMINS, *Governor*,  
Des Moines, Iowa.

DEAR SIR—I have the honor to submit herewith my annual report as Inspector of Boats for the year 1904.

Yours truly,

J. B. THOMPSON,  
*Inspector of Boats.*

#### LICENSES GRANTED FOR BOATS.

##### OKOBOJI LAKES.

Date.	Kind of Vessel.	Name.	Passengers.	Fees.
May 12, 1904	Steamboat	"Hiawatha"	80	\$10
May 18, 1904	Steamboat	Iowa	80	10
May 18, 1904	Steamboat	River Queen	16	5
May 25, 1904	Steamboat	Queen	225	10
May 28, 1904	Steamboat	A. J. Hopkins	70	10
April 30, 1904	Gasoline	Okoboji	300	10
May 9, 1904	Gasoline	"Yankee Photographer"	3	5
May 8, 1904	Gasoline	Alberta	30	10
May 18, 1904	Gasoline	Iowa	85	10
May 19, 1904	Gasoline	Charlotte	18	5
May 21, 1904	Gasoline	West Side	18	5
May 12, 1904	Sailboat	Manhattan	85	10
May 28, 1904	Sailboat	Golden Rule	40	1
June 5, 1904	Sailboat	Nymph	25	1
July 5, 1904	Sailboat	North Breeze	12	1
		Nameless	10	1

##### PETERSON (LITTLE SIOUX RIVER).

July 1, 1904	Steamer	Little Sioux	35	\$ 10
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## LICENSES GRANTED ENGINEERS AND PILOTS.

## SPIRIT LAKE.

Date.	Name.	Engineer or Pilot.	Fees.
March 14, 1904	Otto F. Townsend.....	Pilot .....	\$ 3
June 1, 1904	G. M. Adair .....	Pilot .....	3
June 11, 1904	W. A. Gilfillan.....	Pilot.....	3
Sept. 2, 1904	E. R. Green ...	Pilot....	3

## SPIRIT AND OKOBOJI LAKES.

May 13, 1904	John Haffer.....	Pilot.....	\$ 3
June 18, 1904	F. P. Hopkins .....	Pilot .....	3

## OKOBOJI LAKES.

May 27, 1904	G. P. Hopkins .....	Pilot.....	\$ 3
May 28, 1904	Bertram O'Farrell.....	Pilot.....	3
June 14, 1904	Don. C. Henderson .....	Pilot.....	3
March 14, 1904	Otto F. Townsend.....	Engineer .....	3
May 2, 1904	O. B. Hill .....	Engineer .....	3
May 18, 1904	John Haffer .....	Engineer .....	3
July 14, 1904	Don C. Henderson .....	Engineer .....	3
June 18, 1904	F. P. Hopkins.....	Engineer .....	3
June 16, 1904	Edward Tolson .....	Engineer .....	3
August 21, 1904	Ed. Bryans .....	Engineer .....	3
July 23, 1904	H. W. Marey.....	Engineer .....	3
Sept. 2, 1904	E. R. Greene .....	Engineer .....	3

Total amount received, 1904. .... \$168



